

author index

Index of Issues: July, pp 1-160; August, pp 161-320; September, pp 321-480; October, pp 481-660; November, pp 661-820; December, pp 821-980. Page numbers beginning with S denote articles in the December Pathology Patterns Reviews.

A

Accardi, Luisa, 113
Adeyi, Oyedele A., 537
Admirand, Joan H., 445
Ago, S. Nicholas, 355
Ahmed, Zakaria, 108
Akhil Vaidya, 408
Akioka, Toshikazu, 199
Allison, Kimberly H., 685
Altuna, Xabier, 71
Anthuber, Matthias, 740
Arosio, Cristina, 846

B

Bagg, Adam, 143
Bahler, David W., 930, 937
Bailey, David N., 226
Baillie, E. Eugene, 83
Bakshi, Nasir A., 214
Balassanian, Ronald, 883
Barak, Mira, 129
Barco, Diana, 303
Bardales, Ricardo H., 239
Barnes, Pat, 205
Batts, Kenneth P., 380
Bauermeister, Donald E., 342
Beatrice, Gail H., 770
Becich, Michael J., 500
Becker, Evelyn, 430
Bekisch, Barbara, 37
Belloni, Dorothy R., 537
Benedetto, Arrigo, 113
Bengtsson, Hans-Inge, 770
Berlin, Kurt, 430
Bhattacharyya, Pritish K., 790
Bieber, Thomas, 37
Blick, Kenneth E., 672
Böhler, Per J., 528
Boitnott, John, 512
Boldorini, Renzo, 303
Boltze, Carsten, 288

Bonds, Lian A., 205
Bonello, Lisa, 182
Bonifacio, Donatella, 113
Bonner, Hugh, 143
Børresen-Dale, Anne-Lise, 392
Bouvier, Corinne, 252
Bovo, Giorgio, 846
Brackett, Daniel, 838
Bradwell, Arthur R., 214
Branca, Margherita, 113
Brat, Daniel J., 755
Brazier, Rita M., 920
Briggs, John R., 226
Brini, Maria, 675
Bronner, Mary P., 519
Browne, Tara-Jane, 58, 834
Budka, Herbert, 543
Bueso-Ramos, Carlos E., 414
Burger, Matthias, 430

C

Cairo, Mitchell S., 569
Caldwell, Charles W., 430
Canal, Fabio, 295
Cannizzaro, Linda, 790
Carl T. Wittwer, 330
Carozzi, Francesca Maria, 716
Casey, Jeanne E., 770
Casolati, Elena A., 113
Cassorla, Lydia, 601
Castle, Philip E., 722
Cestari, Cristina, 846
Cha, Imok, 342
Chang, Anthony, 170
Chaves, Fernando, 440
Chen, Jim-Ray, 97
Chen, Ni, 103
Chen, Yunn-Yi, 342
Cherian, Sindhu, 143
Chetty, Runjan, 20
Chhieng, David C., 697

Chiarle, Roberto, 182
Chinellato, Serena, 295
Chitma-Matsiga, Rebecca, 430
Chiusa, Luigi, 182
Cho, HyungJun, 361
Chou, Lan-Szu, 330
Cibas, Edmund S., 58, 834
Ciotti, Marco, 113
Coad, James E., 191
Cole, Laurence A., 108
Colin, Carole, 252
Colombani, Paul M., 512
Confortini, Massimo, 716
Corengia, Chiara, 846
Cortes, Jorge, 807
Costa, Silvano, 113
Craig, Fiona E., 576
Crary, Gretchen S., 239
Crawford, James M., 519
Crisi, Giovanna M., 733
Crowe, Ralph, 697
Crucitti, Paola, 716
Czech, Thomas, 543

D

Dalla Palma, Paolo, 716
Dasgupta, Abhijit, 722
Dasgupta, Amitava, 229
Davidson, Ben, 528
Davis-Devine, Sharon, 24
Day, Sarah J., 24
Dayharsh, Gerald A., 421
Dei Tos, Angelo P., 295
Del Mistro, Annarosa, 716
Delprado, Warwick, 371
De Marco, Laura, 716
De Miguel, Maria P., 245
Depunzio, Ivana, 675
Di Bonito, Luigi, 113
Di Bonito, Paola, 113
Dietmaier, Wolfgang, 740

Ding, Ivan, 282
Di Sant'Agnes, P. Anthony, 282
Djalilvand, Azita, 755
Duff, Dieter, 430
Dufresne, Scott D., 537
Dulau, Alina E., 790

E

Easton, Leanne, 910
Einerson, Richard R., 421
Elin, Ronald J., 108
Eloubeidi, Mohamad A., 697
Eltoum, Isam A., 697
Embry, Mary B., 894
End, Katrin, 550
Etzell, Joan E., 902

F

Facchetti, Fabio, 295
Fan, Guang, 920
Favalli, Cartesio, 113
Favaloro, Emmanuel J., 910
Favaloro, James W.C., 910
Feiner, John, 601
Fenoglio-Preiser, Cecilia, 380
Ferrante, Francesca, 675
Fiebig, Eberhard W., 902
Figarella-Branger, Dominique, 252
Finlay, Heather E., 601
Fletcher, Jonathan A., S16
Flørenes, Vivi Ann, 528
Födinger, Manuela, 560
Forbes, Suzy, 49
Foss, Mary L., 594
Foucar, Kathryn, 205
Freund, Gregory G., 24
Frierson, Henry F., Jr, 361, 873
Fromm, Jonathan R., 170

Froom, Paul, 129
Furlanetto, Alberto, 295
Furmanczyk, Paul S., 355

G

Galimberti, Stefania, 846
Gamel-Didelon, Katia, 550
Gao, Zu-hua, 62
Garstka, Daniel, 214
Genc, Buelent, 430
Genest, David R., 834
Genzen, Jonathan R., 586
Ghali, Violette S., 862
Ghirarduzzi, Angelo, 675
Gilbertson, John R., 500
Gillio Tos, Anna, 716
Giorgi, Colomba, 113
Giorgi, Roch, 252
Girlando, Salvatore, 716
Glassman, Armand, 807
Godse, Chhaya, 408
Goldblum, John R., 519, 685
Goldenring, James R., 519
Goldstein, Neal S., 49
González-Peramato, Pilar, 245
Gormley, Robert P., 790
Goulart, Robert A., 733
Gould, Edwin W., 878
Gratzl, Manfred, 550
Greenberg, Bernard, 143
Greenson, Joel K., 519
Greenwood, Jay H., 930
Grezchnik, Ella, 910
Grieco, Verena S., 355
Griffin, Matthew D., 854
Grover, Davinder S., 512
Grzybek, Debera Y., 770
Grzybicki, Dana Marie, 500
Guinee, Donald G., Jr, 342
Gulbahce, H. Evin, 239
Gulbranson, Ronald, 214
Guo, Juyuan, 430
Gupta, Dilip, 500
Gupta, Meenakshi, 755
Gupta, Sudhir, S84

H

Haavis, Rosa, 129
Haber, Marian M., 519
Hainfellner, Johannes A., 543
Haller, Otto, 37
Halling, Kevin C., 273, 854
Hameed, Omar, 708, 862
Han, Eun Mee, 31
Hanafusa, Toshiaki, 199
Hara, Satoshi, 199
Harmon, C. Reid, 83
Hart, John, 11, 519
Hartung, Leah, 930, 937
Hartzog, Grady, 342

Hashimoto, Beverly, 342
Hashimoto, Manabu, 89
Hassan, Raffit, 838
Helland, Åslaug, 392
Herold, Christian, 288
Herzig, Geoffrey P., 108
Herzig, Roger H., 108
Hill, Sally, 930, 937
Hofstädter, Ferdinand, 740
Holden, Joseph A., 342
Holland, Lorne L., 672
Hollensead, Sandra C., 894
Holm, Ruth, 392, 528
Hong, Seung-Mo, 361, 873
Horny, Hans-Peter, 560
Hortobagyi, Gabriel N., S29
Hsi, Eric D., 134
Hsu, Der-Hung, 97
Huang, James, 920
Huang, Jiaoti, 282
Huang, Tim H.-M., 430
Huh, Yang, 807
Humphrey, Peter A., 708
Hunter, Susan, 49
Huntsman, David, 134
Hynes, William M., S8

I

Iesalnieks, Igors, 740
Iezzoni, Julia C., S110
Ihrke, Johnita M., 854
Ikemoto, Toshiyuki, 199
Inghirami, Giorgio, 182
Inoue, Masaki, 89
Ioachim, Harry L., 790
Ioffe, Olga B., S42
Iorio, Alfonso, 675
Iwamoto, Yukihide, 288

J

Jacobs, Timothy W., 342
Jantsch, Thomas, 740
Jass, Jeremy R., 380
Jenkins, Robert B., 273
Jhala, Darshana, 697
Jhala, Nirag C., 697
Jones, Dan, 807
Jorgensen, Jeffrey L., 414
Jung, Heike, 550

K

Kanaya, Taro, 89
Kantarjian, Hagop, 807
Karandikar, Nitin J., 799
Kaul, Karen L., 404
Keefe, Joan M., 770
Kelley, Todd W., 134
Keren, David F., 214
Kestin, Larry L., 49

Ketterling, Rhett P., 273
Kim, Chul Hwan, 31
Kim, Han Kyeom, 31
Kim, Insun, 31
Kim, Sunghye, 282
Kim, Young-Sik, 31
Kimlinger, Teresa K., 421
Kipp, Benjamin R., 854
Klein, Walter M., 512
Kobayashi, Kichinosuk, 199e
Kodros, Steven, 693
Konoplev, Sergej, 414
Kratz, Alexander, 770
Krauth, Maria-Theresa, 560
Kristensen, Gunnar B., 392
Kroft, Steven H., 191, 799
Krokowski, Manuela, 560
Kuester, Doerthe, 288
Kumar, Pankaj, 790
Kurtin, Paul J., 421
Kussick, Steven J., 170
Kwan, Angela M.Y., 124
Kyo, Satoru, 89

L

Lamps, Laura W., 519
Lan, Chieh, 97
Laszik, Zoltan G., 838
Laurino, Licia, 295
Lauwers, Gregory Y., 519
Lavezzi, Anna Maria, 259
Lazenby, Audrey J., 519
Lê, Lyly H., 20
Lee, Eung Seok, 31
Lee, Jeffrey R., 519
Lee, Kenneth R., 58
Lei, Jun-Yi, 282
Leong, Anthony S.-Y., 31
Lerner, Megan, 838
LeValley, Aaron, 790
Lewandrowski, Elizabeth Lee, S122
Lewandrowski, Kent B., 770
Lewin, David, 519
Lewis, Jason T., 273
Li, Huixiang, 282
Li, Ying, 170
Liang, Shuching, 97
Lin, Pei, 414, 445, 807
Liprandi, Agnès, 252
Liu, Jacqueline Ming, 97
Liu, Tsang-Wu, 97
Lones, Mark A., 569
Lou, Hong, 282
Lüdecke, Dieter, 550
Lundell, Ryan, 937
Lyon, Elaine, 330

M

MacMillan, Donna H., S8

Madan, Rashna, 790
Maida, Yoshiko, 89
Maier, Sabine, 430
Maintenance of Certification Committee, American Board of Pathology, S5
Makari-Judson, Grace, 733
Manazza, Andrea D., 182
Mantel Bassichis, Michelle H., 58
Marconi, Sharon A., 733
Mariani, Luciano, 113
Mariani, Raffaella, 846
Martin, Alvin W., 108
Martini, Giuseppe, 182
Maturri, Luigi, 259
Mayerhofer, Artur, 550
McDonald, Jane, 910
McKenna, Robert W., 191, 799
McLeod, Howard L., 11
McNaghy, Kelly M., 134
Medeiros, L. Jeffrey, 414, 445, 807
Melanson, Stacy E.F., S122
Merzianu, Mihai, 807
Metellus, Philippe, 252
Miller, James J., 108
Miller, Jonathan L., 586
Mills, Stacey E., S96, S110
Mizrachi, Howard, 862
Mizumoto, Yasunari, 89
Molmenti, Ernesto P., 512
Molstad, Michael, 920
Monga, Guido, 303
Montgomery, Elizabeth, 519
Moore, Malcolm J., 20
Moore, S. Breannan, 594
Moran, Cesar A., 749
Moskaluk, Christopher A., 361, 873
Mourvaki, Evangelia, 675
Murali, Rajmohan, 371

N

Nagalla, Srinivasa, 920
Naka, Takahiko, 288
Nakajima, Hideto, 199
Nakamura, Mitsuhiro, 89
Nakhleh, Raouf E., 489
Narula, Jagat, S84
Narula, Navneet, S84
Neck, Alexander, 129
Nesland, Jahn M., 392
Ng, Valerie L., 902
Nguyen, Mai T.P., 528
Nielsen, Søren, 782
Nimmrich, Inko, 430
Nistal, Manuel, 245
Nodit, Laurentia, 883
Norwood, Thomas H., 170
Novero, Domenico, 182

O

Oda, Yoshinao, 288
 Odish, Eva, 49
 Oka, Satoko, 199
 Oliveira, Andre M., S15
 Ongkeko, Weg M., 71
 Orvieto, Enrico, 295
 Ostertag, Helmut, 288
 Ottaviani, Giulia, 259
 Owen, William E., 219

P

Paba, Pierluigi, 113
 Pagano, Marco, 182
 Palestro, Giorgio, 182
 Pambuccian, Stefan E., 239
 Pasquariello, Anna C., 404
 Patel, Rajiv M., 685
 Patterson, James W., S52
 Paule, Suzanne M., 404
 Pellegrini, Antonella, 716
 Peng, Jacqueline Whang, 97
 Perkins, Sherrie L., 569, 930, 937
 Peterson, Lance R., 404
 Peterson, LoAnn C., 191
 Pierotti, Paola, 716
 Pildain, Alex J., 799
 Piperno, Alberto, 846
 Postier, Russell, 838
 Pozzi, Massimo, 846
 Preusser, Matthias, 543
 Pulijaal, Venkat, 790
 Puliti, Donella, 716
 Pusztai, Lajos, S29

Q

Quilichini, Benoit, 252

R

Raab, Stephen S., 500, 883
 Raffeld, Mark, 838
 Rahmatpanah, Farahnaz, 430
 Ramesh, K.H., 790
 Ratech, Howard, 790
 Ray, Sourav, 576
 Redaelli, Alessandro, 846
 Regadera, Javier, 245
 Remstein, Ellen D., 421
 Renshaw, Andrew A., 878
 Reyes, Meredith A., 229
 Reynolds, Carol, 273

Riva, Alessia, 846
 Ro, Jae Y., 361
 Robert, Marie E., 519
 Roberts, William L., 219
 Rodgers, William, 920
 Roessner, Albert, 288
 Ronco, Guglielmo, 716
 Roskelley, Calvin D., 134
 Ross, Jeffrey S., S16, S29
 Rossi, Sabrina, 295
 Rossini, Anthony, 170
 Rubin, Brian P., 685
 Rümmele, Petra, 740

S

Said, Jonathan W., 569
 Sakaguchi, Junko, 89
 Samii, Amir, 288
 Sanger, Warren G., 569
 Sani, Cristina, 716
 Santini, Donatella, 113
 Sargent, Rachel, 143
 Savik, Kay, 239
 Schiboni, Maria Luisa, 716
 Schiffman, Mark, 722
 Schlitt, Hans J., 740
 Schned, Alan R., 537
 Schwarz, Kathleen B., 512
 Sebo, Thomas J., 854
 Seethala, Raja, 143
 Serrano, Alvaro, 245
 Sever, Cordelia E., 205
 Sherman, Susan M., 83
 Shi, Huidong, 430
 Shimizu, Akira, 199
 Shin, Bong Kyung, 31
 Shir, Michaela, 129
 Siegal, Gene P., 697
 Slavic, Irene, 543
 Slipicevic, Ana, 528
 Slone, Stephen P., 108
 Smith, Linda L., 672
 Snover, Dale C., 380
 Solomon, Diane, 722
 Soltani, Soma, 910
 Sorge, John P., 83
 Sotlar, Karl, 560
 Sparano, Joseph, 790
 Stacchini, Alessandra, 182
 Standley, Melissa, 920
 Stanley, Michael W., 239
 Stelow, Edward B., 239, 829, S96
 Stewart, Laura E., 77

St John, Kay D., 697
 Sudilovsky, Daniel, 883
 Suster, Saul, 749
 Swerdlow, Steven H., 576
 Symmans, W. Fraser, S29
 Syrjänen, Kari, 113
 Syrjänen, Stina, 113

T

Takakura, Masahiro, 89
 Talwalkar, Sameer S., 408
 Tamas, Ecaterina F., 790
 Tamhane, Ashutosh, 697
 Tarella, Corrado, 182
 Tartter, Paul I., 862
 Taxy, Jerome B., 693
 Teitell, Michael A., 569
 Thomson, Richard B., Jr, 404
 Tierno, Bethany, 440
 Tolnay, Markus, 550
 Torbenson, Michael S., 512
 Torlakovic, Emina, 782
 Toy, Pearl, 601
 Trevisan, Rossana, 716
 Tsongalis, Gregory J., 537
 Tsuji, Motomu, 199
 Tsuneyoshi, Masazumi, 288
 Tuanu-Dinh, Vonny, 269
 Turcsanyi, Brian, 500
 Turello, Ernesto, 303
 Tüting, Thomas, 37
 Tyler, Douglas S., 77

U

Uerlich, Manfred, 37
 Urbanski, Stefan J., 62

V

Vaidya, A.B., 408
 Vaidya, Rama, 408
 Valbuena, Jose R., 445
 Valent, Peter, 560
 Valsecchi, Maria Grazia, 846
 Van Cott, Elizabeth M., 770
 Vega-Perez, Maria, 245
 Veggiani, Claudia, 303
 Vergani, Anna, 846
 Vicini, Frank A., 49
 Vickers, Selwyn, 697
 Vignato, Alberta, 716
 Visscher, Daniel W., 273
 Vitolo, Umberto, 182

Vollmer, Robin T., 77
 Vyberg, Mogens, 782

W

Walsh, Daniel, 790
 Wang, Hanlin L., 11
 Wang, Luping, 282
 Wang, Yun, 392
 Wang-Rodriguez, Jessica, 71
 Washington, Mary Kay, 519
 Weisman, Robert A., 71
 Wenzel, Joerg, 37
 Wheeler, Cosette M., 722
 Whitis, Janine G., 894
 Wick, Mark R., 494, S52
 Wilcox, C. Mel, 697
 Willis, Monte S., 191
 Wolfsberger, Stefan, 543
 Wolverton, Dulcy, 342
 Won, Nam Hee, 31
 Wong, K.F., 124
 Wood, Brent L., 170
 Wu, Mark Li-cheng, 269

X

Xu, Dongsheng, 440, 790
 Xu, Yin, 799
 Xue, Xiaonan, 790

Y

Yamano, Takeshi, 199
 Yang, David T., 930
 Yeh, Matthew M., 491
 Yeom, Bom Woo, 31
 Yin, Cameron, 807
 Yokote, Taiji, 199
 Yu, Eunsil, 361

Z

Zanconati, Francesca, 113
 Zhang, Ling, 894
 Zhang, Lurong, 282
 Zhang, Wanghai, 11
 Zhao, Xian-Feng, 143
 Zhou, Qiao, 103
 Zülke, Carl, 740

title index

Index of Issues: July, pp 1-160; August, pp 161-320; September, pp 321-480; October, pp 481-660; November, pp 661-820; December, pp 821-980. Page numbers beginning with S denote articles in the December Pathology Patterns Reviews.

ANATOMIC PATHOLOGY

Case Report

- Positive Pregnancy Tests in a Nongravid, Premenopausal Woman Due to hCG β -Chain Production by Multiple Myeloma
Stephen P. Slone, Zakaria Ahmed, Laurence A. Cole, Ronald J. Elin, Alvin W. Martin, Roger H. Herzig, Geoffrey P. Herzig, and James J. Miller, 108

Original Articles

- Analysis of Intratumoral Heterogeneity and Amplification Status in Breast Carcinomas With Equivocal (2+) HER-2 Immunostaining
Jason T. Lewis, Rhett P. Ketterling, Kevin C. Halling, Carol Reynolds, Robert B. Jenkins, and Daniel W. Visscher, 273
- Analysis of Polyomavirus-Infected Renal Transplant Recipients' Urine Specimens: Correlation of Routine Urine Cytology, Fluorescence In Situ Hybridization, and Digital Image Analysis
Benjamin R. Kipp, Thomas J. Sebo, Matthew D. Griffin, Johnita M. Ihrke, and Kevin C. Halling, 854
- AP-2 γ Protein Expression in Intratubular Germ Cell Neoplasia of Testis
Seung-Mo Hong, Henry F. Frierson, Jr, and Christopher A. Moskaluk, 873
- Are Sequence Variations in the BK Virus Control Region Essential for the Development of Polyomavirus Nephropathy?
Renzo Boldorini, Claudia Veggiani, Ernesto Turello, Diana Barco, and Guido Monga, 303
- Association of Mismatch Repair Deficiency With *PTEN* Frameshift Mutations in Endometrial Cancers and the Precursors in a Japanese Population
Taro Kanaya, Satoru Kyo, Junko Sakaguchi, Yoshiko Maida, Mitsuhiro Nakamura, Masahiro Takakura, Manabu Hashimoto, Yasunari Mizumoto, and Masaki Inoue, 89
- Biliary Brush Cytology and the Detection of Cholangiocarcinoma in Primary Sclerosing Cholangitis: Evaluation of Specific Cytomorphologic Features and CA19-9 Levels
Paul S. Furmanczyk, Verena S. Grieco, and S. Nicholas Agoff, 355
- CD10 Immunohistochemical Staining in Urothelial Neoplasms
Rajmohan Murali and Warick Delprado, 371
- CDX2 and MUC2 Protein Expression in Extrahepatic Bile Duct Carcinoma
Seung-Mo Hong, HyungJun Cho, Christopher A. Moskaluk, Henry F. Frierson, Jr, Eunsil Yu, and Jae Y. Ro, 361
- The Clinical Significance of Benign-Appearing Endometrial Cells on a Papanicolaou Test in Women 40 Years or Older
Tara-Jane Browne, David R. Genest, and Edmund S. Cibas, 834

Colorectal Intramucosal Perikarya of Ganglion Cells

Vonny Tunru-Dinh and Mark Li-cheng Wu, 269

A Comparison of a Prototype PCR Assay and Hybrid Capture 2 for Detection of Carcinogenic Human Papillomavirus DNA in Women With Equivocal or Mildly Abnormal Papanicolaou Smears

Mark Schiffman, Cosette M. Wheeler, Abhijit Dasgupta, Diane Solomon, and Philip E. Castle, 722

Comparison of Disagreement and Error Rates for Three Types of Interdepartmental Consultations

Andrew A. Renshaw and Edwin W. Gould, 878

Constructing Tissue Microarrays Without Prefabricating Recipient Blocks: A Novel Approach

Ni Chen and Qiao Zhou, 103

Cytologic Grade Independently Predicts Survival of Patients With Pancreatic Adenocarcinoma

Isam A. Eltoun, Mohamad A. Eloubeidi, David C. Chhieng, Ashutosh Tamhane, Ralph Crowe, Darshana Jhala, Kay D. St John, C. Mel Wilcox, Gene P. Siegal, Selwyn Vickers, and Nirag C. Jhala, 697

A Data Management Approach to Quality Assurance Using Colorectal Carcinoma Reports From Two Institutions as a Model

John P. Sorge, C. Reid Harmon, Susan M. Sherman, and E. Eugene Baillie, 83

Differential Expression of the AP-1 Transcription Factor Family Members in Human Colorectal Epithelial and Neuroendocrine Neoplasms

Wanghai Zhang, John Hart, Howard L. McLeod, and Hanlin L. Wang, 11

Enlarged Squamous Cell Nuclei in Cervical Cytologic Specimens From Perimenopausal Women ("PM Cells"): A Cause of ASC Overdiagnosis

Edmund S. Cibas, Tara-Jane Browne, Michelle H. Mantel Bassichis, and Kenneth R. Lee, 58

Epidermal Growth Factor Receptor Expression in Anal Canal Carcinoma

Lyly H. Lê, Runjan Chetty, and Malcolm J. Moore, 20

erb-b2 Amplification by Fluorescence In Situ Hybridization in Breast Cancer Specimens Read as 2+ in Immunohistochemical Analysis

Chieh Lan, Jacqueline Ming Liu, Tsang-Wu Liu, Der-Hung Hsu, Shuching Liang, Jim-Ray Chen, and Jacqueline Whang Peng, 97

Expression of Activated Akt and PTEN in Malignant Melanomas: Relationship With Clinical Outcome

Ana Slipicevic, Ruth Holm, Mai T.P. Nguyen, Per J. Böhler, Ben Davidson, and Vivi Ann Flørenes, 528

- Expression of *c-kit* in Adenoid Cystic Carcinoma of the Breast
Giovanna M. Crisi, Sharon A. Marconi, Grace Makari-Judson, and Robert A. Goulart, 733
- Expression of Protein Tyrosine Kinases in Head and Neck Squamous Cell Carcinomas
Weg M. Ongkeko, Xabier Altuna, Robert A. Weisman, and Jessica Wang-Rodriguez, 71
- Factors Associated With Disease Progression in Patients With Gastrointestinal Stromal Tumors in the Pre-Imatinib Era
Igor Lesniewski, Petra Rümmele, Wolfgang Dietmaier, Thomas Jantsch, Carl Zülke, Hans J. Schlitt, Ferdinand Hofstädter, and Matthias Anthuber, 740
- Fibroepithelial Lesions With Cellular Stroma on Breast Core Needle Biopsy: Are There Predictors of Outcome on Surgical Excision?
Timothy W. Jacobs, Yunn-Yi Chen, Donald G. Guinee, Jr, Joseph A. Holden, Imok Cha, Donald E. Bauermeister, Beverly Hashimoto, Dulcy Wolverton, and Grady Hartzog, 342
- Immunohistochemical Staining for Cyclin D1 and Ki-67 Aids in the Stratification of Atypical Ductal Hyperplasia Diagnosed on Breast Core Biopsy
Omar Hameed, Violette S. Ghali, Paul I. Tartert, and Howard Mizrahi, 862
- The Importance of Total Number of Sentinel Lymph Nodes in Patients With Stage N0 Cutaneous Melanoma
Laura E. Stewart, Douglas S. Tyler, and Robin T. Vollmer, 77
- Improving the Quality of Cytology Diagnosis: Root Cause Analysis for Errors in Bronchial Washing and Brushing Specimens
Laurentia Nodit, Ronald Balassanian, Daniel Sudilovsky, and Stephen S. Raab, 883
- Interobserver Variability in Thyroid Fine-Needle Aspiration Interpretation of Lesions Showing Predominantly Colloid and Follicular Groups
Edward B. Stelow, Ricardo H. Bardales, Gretchen S. Crary, H. Evin Gulbahce, Michael W. Stanley, Kay Savik, and Stefan E. Pambuccian, 239
- Intralesional Fibrous Septum in Chordoma: A Clinicopathologic and Immunohistochemical Study of 122 Lesions
Takahiko Naka, Carsten Boltze, Doerthe Kuester, Amir Samii, Christian Herold, Helmut Ostertag, Yukihide Iwamoto, Yoshinao Oda, Masazumi Tsuneyoshi, and Albert Roessner, 288
- Iron Accumulation in Chronic Hepatitis C: Relation of Hepatic Iron Distribution, *HFE* Genotype, and Disease Course
Chiara Corengia, Stefania Galimberti, Giorgio Bovo, Anna Vergani, Cristina Arosio, Raffaella Mariani, Alessandro Redaelli, Alessia Riva, Cristina Cestari, Massimo Pozzi, Maria Grazia Valsecchi, and Alberto Piperno, 846
- Lack of Alkaline Phosphatase Activity Predicts Meningioma Recurrence
Corinne Bouvier, Agnès Liprandi, Carole Colin, Roch Giorgi, Benoit Quilichini, Philippe Metellus, and Dominique Figarella-Branger, 252
- Mesothelin Is Overexpressed in Pancreaticobiliary Adenocarcinomas But Not in Normal Pancreas and Chronic Pancreatitis
Raffit Hassan, Zoltan G. Laszik, Megan Lerner, Mark Raffeld, Russell Postier, and Daniel Brackett, 838
- Molecular Clonality Relationships in Initial Carcinomas, Ipsilateral Breast Failures, and Distant Metastases in Patients Treated With Breast-Conserving Therapy: Evidence Suggesting That Some Distant Metastases Are Derived From Ipsilateral Breast Failures and That Metastases Can Metastasize
Neal S. Goldstein, Frank A. Vicini, Susan Hunter, Eva Odish, Suzy Forbes, and Larry L. Kestin, 49
- Musculoskeletal Coccidioidomycosis: Unusual Sites of Disease in a Nonendemic Area
Jerome B. Taxy and Steven Kodros, 693
- Occurrence of *c-kit*+ Tumor Cells in Hepatitis B Virus-Associated Hepatocellular Carcinoma
Eung Seok Lee, Eun Mee Han, Young-Sik Kim, Bong Kyung Shin, Chul Hwan Kim, Han Kyeom Kim, Nam Hee Won, Bom Woo Yeom, Insun Kim, and Anthony S.-Y. Leong, 31
- Overexpression of Decoy Receptor 3 in Precancerous Lesions and Adenocarcinoma of the Esophagus
Huixiang Li, Lurong Zhang, Hong Lou, Ivan Ding, Sunghye Kim, Luping Wang, Jiaoti Huang, P. Anthony Di Sant'Agnese, and Jun-Yi Lei, 282
- p63/AMACR Antibody Cocktail Restaining of Prostate Needle Biopsy Tissues After Transfer to Charged Slides: A Viable Approach in the Diagnosis of Small Atypical Foci That Are Lost on Block Sectioning
Omar Hameed and Peter A. Humphrey, 708
- Paratesticular Cysts With Benign Epithelial Proliferations of Wolffian Origin
Manuel Nistal, Pilar González-Peramato, Alvaro Serrano, Maria Vega-Perez, Maria P. De Miguel, and Javier Regadera, 245
- Primary Liver Carcinoma Arising in People Younger Than 30 Years
Walter M. Klein, Ernesto P. Molmenti, Paul M. Colombani, Davinder S. Grover, Kathleen B. Schwarz, John Boitnott, and Michael S. Torbenson, 512
- Primary Parathyroid Tumors of the Mediastinum: A Clinicopathologic and Immunohistochemical Study of 17 Cases
Cesar A. Moran and Saul Suster, 749
- Rab11a Immunohistochemical Analysis Does Not Distinguish Indefinite, Low-, and High-Grade Dysplasia in Barrett Esophagus
Marie E. Robert, Mary Kay Washington, Jeffrey R. Lee, James R. Goldenring, Mary P. Bronner, John R. Goldblum, Joel K. Greenson, Marian M. Haber, John A. Hart, Laura W. Lamps, Gregory Y. Lauwers, David Lewin, Audrey J. Lazenby, Elizabeth Montgomery, and James M. Crawford, 519
- Rabbit Monoclonal Antibodies: A Comparative Study Between a Novel Category of Immunoreagents and the Corresponding Mouse Monoclonal Antibodies
Sabrina Rossi, Licia Laurino, Alberto Furlanetto, Serena Chinellato, Enrico Orvieto, Fabio Canal, Fabio Facchetti, and Angelo P. Dei Tos, 295
- Real-Time Polymerase Chain Reaction and Laser Capture Microdissection for the Diagnosis of BK Virus Infection in Renal Allografts
Oyedele A. Adeyi, Dorothy R. Belloni, Scott D. Dufresne, Alan R. Schned, and Gregory J. Tsongalis, 537
- Receptors and Sites of Synthesis and Storage of γ -Aminobutyric Acid in Human Pituitary Glands and in Growth Hormone Adenomas
Katrin End, Katia Gamel-Didelon, Heike Jung, Markus Tolnay, Dieter Lüdecke, Manfred Gratzl, and Artur Mayerhofer, 550
- Reproducibility of HPV DNA Testing by Hybrid Capture 2 in a Screening Setting: Intralaboratory and Interlaboratory Quality Control in Seven Laboratories Participating in the Same Clinical Trial
Francesca Maria Carozzi, Annarosa Del Mistro, Massimo Confortini, Cristina Sani, Donella Puliti, Rossana Trevisan, Laura De Marco, Anna Gillio Tos, Salvatore Girlando, Paolo Dalla Palma, Antonella Pellegrini, Maria Luisa Schiboni, Paola Crucitti, Paola Pierotti, Alberta Vignato, and Guglielmo Ronco, 716

The Spectrum of Pulmonary Mucinous Cystic Neoplasia: A Clinicopathologic and Immunohistochemical Study of Ten Cases and Review of the Literature

Zu-hua Gao and Stefan J. Urbanski, 62

Superficial Malignant Peripheral Nerve Sheath Tumor: A Rare and Challenging Diagnosis

Kimberly H. Allison, Rajiv M. Patel, John R. Goldblum, and Brian P. Rubin, 685

Survivin Expression in Intracranial Ependymomas and Its Correlation With Tumor Cell Proliferation and Patient Outcome

Matthias Preusser, Stefan Wolfsberger, Thomas Czech, Irene Slavec, Herbert Budka, and Johannes A. Hainfellner, 543

Techniques and Criteria in Pathologic and Forensic-Medical Diagnostics in Sudden Unexpected Infant and Perinatal Death

Luigi Maturri, Giulia Ottaviani, and Anna Maria Lavezzi, 259

Test Performance Comparison of Inform HPV and Hybrid Capture 2 High-Risk HPV DNA Tests Using the SurePath Liquid-Based Pap Test as the Collection Method

Sharon Davis-Devine, Sarah J. Day, and Gregory G. Freund, 24

Type I Interferon-Associated Recruitment of Cytotoxic Lymphocytes: A Common Mechanism in Regressive Melanocytic Lesions

Joerg Wenzel, Barbara Bekisch, Manfred Uerlich, Otto Haller, Thomas Bieber, and Thomas Tüting, 37

Review Articles

Clarifying the Diffuse Gliomas: An Update on the Morphologic Features and Markers That Discriminate Oligodendroglioma From Astrocytoma

Meenakshi Gupta, Azita Djalilvand, and Daniel J. Brat, 755

Protein Expression and Prognostic Value of Genes in the erb-b Signaling Pathway in Advanced Ovarian Carcinomas

Yun Wang, Gunnar B. Kristensen, Åslaug Helland, Jahn M. Nesland, Anne-Lise Børresen-Dale, and Ruth Holm, 392

Serrated Polyps of the Large Intestine: A Morphologic and Molecular Review of an Evolving Concept

Dale C. Snover, Jeremy R. Jass, Cecilia Fenoglio-Preiser, and Kenneth P. Batts, 380

Survivin as a Marker of Cervical Intraepithelial Neoplasia and High-Risk Human Papillomavirus and a Predictor of Virus Clearance and Prognosis in Cervical Cancer

Margherita Branca, Colomba Giorgi, Donatella Santini, Luigi Di Bonito, Marco Ciotti, Silvano Costa, Arrigo Benedetto, Elena A. Casolati, Cartesio Favalli, Pierluigi Paba, Paola Di Bonito, Luciano Mariani, Stina Syrjänen, Donatella Bonifacio, Luisa Accardi, Francesca Zanconati, and Kari Syrjänen, 113

BASIC SCIENCE

Original Article

A Comparison of High-Resolution Melting Analysis With Denaturing High-Performance Liquid Chromatography for Mutation Scanning: Cystic Fibrosis Transmembrane Conductance Regulator Gene as a Model

Lan-Szu Chou, Elaine Lyon, and Carl T. Wittwer, 330

CLINICAL CHEMISTRY

Original Articles

Effect of Brazilian, Indian, Siberian, Asian, and North American Ginseng on Serum Digoxin Measurement by Immunoassays and Binding of Digoxin-like Immunoreactive Components of Ginseng

With Fab Fragment of Antidigoxin Antibody (Digibind)

Amitava Dasgupta and Meredith A. Reyes, 229

Performance Characteristics of an HPLC Assay for Urinary Albumin

William E. Owen and William L. Roberts, 219

Performance Comparison of Three Assay Methods Used in Fasting and Postmethionine Load Plasma Homocysteine Determinations From Patients With Vascular Disease

Evangelia Mourvaki, Francesca Ferrante, Angelo Ghirarduzzi, Maria Brini, Ivana Depunzio, and Alfonso Iorio, 675

Reducing Laboratory Turnaround Time Outliers Can Reduce

Emergency Department Patient Length of Stay: An 11-Hospital Study

Lorne L. Holland, Linda L. Smith, and Kenneth E. Blick, 672

Studies of the Inhibition of Serum Pseudocholinesterase Activity In Vitro by Commonly Used Drugs

David N. Bailey and John R. Briggs, 226

COAGULATION AND TRANSFUSION MEDICINE

Original Articles

Automatic Laboratory-Initiated Reflex Testing to Identify Patients With Autoimmune Hemolytic Anemia

Paul Froom, Alexander Neck, Michaela Shir, Rosa Haavis, and Mira Barak, 129

Clinically Relevant Differences in Prothrombin Time and INR

Values Related to Blood Sample Collection in Plastic vs Glass Tubes

Eberhard W. Fiebig, Joan E. Etzell, and Valerie L. Ng, 902

Designing and Testing a Computer-Based Screening System for Transfusion-Related Acute Lung Injury

Heather E. Finlay, Lydia Cassorla, John Feiner, and Pearl Toy, 601

Presence of Direct Thrombin Inhibitors Can Affect the Results and Interpretation of Lupus Anticoagulant Testing

Jonathan R. Genzen and Jonathan L. Miller, 586

Quality School: An Innovative Approach to Laboratory Quality Practices Training

Mary L. Foss and S. Breannan Moore, 594

Reassessment of ABO Blood Group, Sex, and Age on Laboratory Parameters Used to Diagnose von Willebrand Disorder: Potential Influence on the Diagnosis vs the Potential Association With Risk of Thrombosis

Emmanuel J. Favaloro, Soma Soltani, Jane McDonald, Ella Grezchnik, Leanne Easton, and James W.C. Favaloro, 910

A Simplified Algorithm for the Laboratory Detection of Lupus Anticoagulants: Utilization of Two Automated Integrated Tests

Ling Zhang, Janine G. Whittis, Mary B. Embry, and Sandra C. Hollensead, 894

Virtual Blood Banking: A 7-Year Experience

K.F. Wong and Angela M.Y. Kwan, 124

EDITORIALS

Endometrial Cells and the Papanicolaou Test

Edward B. Stelow, 829

Immunohistochemical Analysis in Hepatocellular Carcinoma: Does Age Matter?

Matthew M. Yeh, 491

A Prelude to Error Reduction in Anatomic Pathology

Raouf E. Nakhleh, 489

HEMATOPATHOLOGY

Original Articles

- Abnormal Patterns of Antigenic Expression in Follicular Lymphoma: A Flow Cytometric Study
Sourav Ray, Fiona E. Craig, and Steven H. Swerdlow, 576
- Acetic Acid–Zinc–Formalin: A Safe Alternative to B-5 Fixative
Lian A. Bonds, Pat Barnes, Kathryn Foucar, and Cordelia E. Sever, 205
- Antibody Selection in Immunohistochemical Detection of Cyclin D1 in Mantle Cell Lymphoma
Emina Torlakovic, Søren Nielsen, and Mogens Vyberg, 782
- Delineation of Patterns of Bone Marrow Mast Cell Infiltration in Systemic Mastocytosis: Value of CD25, Correlation With Subvariants of the Disease, and Separation From Mast Cell Hyperplasia
Manuela Krokowski, Karl Sotlar, Maria-Theresa Krauth, Manuela Födinger, Peter Valent, and Hans-Peter Horny, 560
- Differential DNA Methylation of Gene Promoters in Small B-Cell Lymphomas
Juyuan Guo, Matthias Burger, Inko Nimmrich, Sabine Maier, Evelyn Becker, Buelent Genc, Dieter Duff, Farahnaz Rahmatpanah, Rebecca Chitima-Matsiga, Huidong Shi, Kurt Berlin, Tim H.-M. Huang, and Charles W. Caldwell, 430
- Expanded Populations of Surface Membrane Immunoglobulin Light Chain–Negative B Cells in Lymph Nodes Are Not Always Indicative of B-Cell Lymphoma
Xian-Feng Zhao, Sindhu Cherian, Rachel Sargent, Raja Seethala, Hugh Bonner, Bernard Greenberg, and Adam Bagg, 143
- FISH Is Superior to PCR in Detecting t(14;18)(q32;q21)–IgH/bcl-2 in Follicular Lymphoma Using Paraffin-Embedded Tissue Samples
Richard R. Einerson, Paul J. Kurtin, Gerald A. Dayharsh, Teresa K. Kimlinger, and Ellen D. Remstein, 421
- Flow Cytometric Analysis of Different CD14 Epitopes Can Help Identify Immature Monocytic Populations
David T. Yang, Jay H. Greenwood, Leah Hartung, Sally Hill, Sherrie L. Perkins, and David W. Bahler, 930
- Flow Cytometric Analysis of Monocytes as a Tool for Distinguishing Chronic Myelomonocytic Leukemia From Reactive Monocytosis
Yin Xu, Robert W. McKenna, Nitin J. Karandikar, Alex J. Pildain, and Steven H. Kroft, 799
- Flow Cytometric Immunophenotyping of Adult T-Cell Leukemia/Lymphoma Using CD3 Gating
Taiji Yokote, Toshikazu Akioka, Satoko Oka, Satoshi Hara, Kichinosuke Kobayashi, Hideto Nakajima, Takeshi Yamano, Toshiyuki Ikemoto, Akira Shimizu, Motomu Tsuji, and Toshiaki Hanafusa, 199
- Follicular Origin of a Subset of CD5+ Diffuse Large B-Cell Lymphomas
Andrea D. Manazza, Lisa Bonello, Marco Pagano, Luigi Chiusa, Domenico Novero, Alessandra Stacchini, Giuseppe Martini, Umberto Vitolo, Corrado Tarella, Giorgio Inghirami, Giorgio Palestro, and Roberto Chiarle, 182
- Four-Color Flow Cytometry Shows Strong Concordance With Bone Marrow Morphology and Cytogenetics in the Evaluation for Myelodysplasia
Steven J. Kussick, Jonathan R. Fromm, Anthony Rossini, Ying Li, Anthony Chang, Thomas H. Norwood, and Brent L. Wood, 170
- Germinal Center and Activated B-Cell Profiles Separate Burkitt Lymphoma and Diffuse Large B-Cell Lymphoma in AIDS and Non-AIDS Cases
Robert P. Gormley, Rashna Madan, Alina E. Dulau, Dongsheng Xu, Ecaterina F. Tamas, Pritish K. Bhattacharyya, Aaron LeValley, Xiaonan Xue, Pankaj Kumar, Joseph Sparano, K.H. Ramesh, Venkat Pulijaal, Linda Cannizzaro, Daniel Walsh, Harry L. Joachim, and Howard Ratch, 790
- Immunophenotypic Profile of Lymphoplasmacytic Lymphoma/Waldenström Macroglobulinemia
Sergej Konoplev, L. Jeffrey Medeiros, Carlos E. Bueso-Ramos, Jeffrey L. Jorgensen, and Pei Lin, 414
- inv(16)(p13q22) in Chronic Myelogenous Leukemia in Blast Phase: A Clinicopathologic, Cytogenetic, and Molecular Study of Five Cases
Mihai Merzianu, L. Jeffrey Medeiros, Jorge Cortes, Cameron Yin, Pei Lin, Dan Jones, Armand Glassman, Hagop Kantarjian, and Yang Huh, 807
- Low Blast Count Myeloid Disorders With Auer Rods: A Clinicopathologic Analysis of 9 Cases
Monte S. Willis, Robert W. McKenna, LoAnn C. Peterson, James E. Coad, and Steven H. Kroft, 191
- Myeloid Sarcoma Involving the Testis
Jose R. Valbuena, Joan H. Admirand, Pei Lin, and L. Jeffrey Medeiros, 445
- Performance Evaluation of the CellaVision DM96 System: WBC Differentials by Automated Digital Image Analysis Supported by an Artificial Neural Network
Alexander Kratz, Hans-Inge Bengtsson, Jeanne E. Casey, Joan M. Keefe, Gail H. Beatrice, Debra Y. Grzybek, Kent B. Lewandowski, and Elizabeth M. Van Cott, 770
- Podocalyxin: A Marker of Blasts in Acute Leukemia
Todd W. Kelley, David Huntsman, Kelly M. McNagny, Calvin D. Roskelley, and Eric D. Hsi, 134
- Proteomic Profiling of Mature CD10+ B-Cell Lymphomas
Guang Fan, Michael Molstad, Rita M. Brazier, Melissa Standley, James Huang, William Rodgers, and Srinivasa Nagalla, 920
- Quantitative Determination of Neutrophil VCS Parameters by the Coulter Automated Hematology Analyzer: New and Reliable Indicators for Acute Bacterial Infection
Fernando Chaves, Bethany Tierno, and Dongsheng Xu, 440
- T-Cell Large Granular Lymphocyte Leukemias Have Multiple Phenotypic Abnormalities Involving Pan-T-Cell Antigens and Receptors for MHC Molecules
Ryan Lundell, Leah Hartung, Sally Hill, Sherrie L. Perkins, and David W. Bahler, 937
- TCL1 Expression and Epstein-Barr Virus Status in Pediatric Burkitt Lymphoma
Michael A. Teitell, Mark A. Lones, Sherrie L. Perkins, Warren G. Sanger, Mitchell S. Cairo, and Jonathan W. Said, 569

IMMUNOPATHOLOGY

Original Article

- Serum Free Light Chain (FLC) Measurement Can Aid Capillary Zone Electrophoresis in Detecting Subtle FLC-Producing M Proteins
Nasir A. Bakshi, Ronald Gulbranson, Daniel Garstka, Arthur R. Bradwell, and David F. Keren, 214

INFORMATICS

Original Article

- Database Construction for Improving Patient Safety by Examining Pathology Errors
Dana Marie Grzybicki, Brian Turcsanyi, Michael J. Becich, Dilip Gupta, John R. Gilbertson, and Stephen S. Raab, 500

MICROBIOLOGY AND INFECTIOUS DISEASE

Original Articles

Plasmodium DNA Fluoresces With Berberine: A Novel Approach for Diagnosis of Malarial Parasites

Sameer S. Talwalkar, A.B. Vaidya, Chhaya Godse, Akhil Vaidya, and Rama Vaidya, 408

Real-Time PCR Can Rapidly Detect Methicillin-Susceptible and Methicillin-Resistant *Staphylococcus aureus* Directly From Positive Blood Culture Bottles

Suzanne M. Paule, Anna C. Pasquariello, Richard B. Thomson, Jr, Karen L. Kaul, and Lance R. Peterson, 404

PATHOLOGY PATTERNS REVIEWS

Cutaneous Melanocytic Lesions: Selected Problem Areas

Mark R. Wick and James W. Patterson, S52

Establishing a Compensation Model in an Academic Pathology Department

William M. Hynes and Donna H. MacMillan, S8

Laboratory Testing for B-Type Natriuretic Peptides (BNP and NT-proBNP): Clinical Usefulness, Utilization, and Impact on Hospital Operations

Stacy E.F. Melanson and Elizabeth Lee Lewandrowski, S122

Maintenance of Certification for Pathologists: What We Know So Far

Maintenance of Certification Committee, American Board of Pathology, S5

Pharmacogenomics and Clinical Biomarkers in Drug Discovery and Development

Jeffrey S. Ross, W. Fraser Symmans, Lajos Pusztai, and Gabriel N. Hortobagyi, S29

The Primary Vasculitides: A Clinicopathologic Correlation

Navneet Narula, Sudhir Gupta, and Jagat Narula, S84

Recent Developments and Selected Diagnostic Problems in Carcinomas of the Endometrium

Olga B. Ioffe, S42

Squamous Cell Carcinoma Variants of the Upper Aerodigestive Tract

Edward B. Stelow and Stacey E. Mills, S95

Tumor Suppressor Genes in Breast Cancer: The Gatekeepers and the Caretakers

Andre M. Oliveira, Jeffrey S. Ross, and Jonathan A. Fletcher, S15

"Undifferentiated" Small Round Cell Tumors of the Sinonasal

Tract: Differential Diagnosis Update

Julia C. Iezzoni and Stacey E. Mills, S110

SPECIAL ARTICLE

Pathology Publications: Past, Present, and Future

Mark R. Wick, 494

subject index

Index of Issues: July, pp 1-160; August, pp 161-320; September, pp 321-480; October, pp 481-660; November, pp 661-820; December, pp 821-980. Page numbers beginning with S denote articles in the December Pathology Patterns Reviews.

A

- ABO groups, reassessment of sex, age, and, on laboratory parameters used to diagnose von Willebrand disorder, potential influence on diagnosis vs potential association with risk of thrombosis, 910
- Abstracts of Papers, 453, 625
- Academic pathology department, establishing a compensation model in an, S8
- Accuracy, diagnostic. *See* Diagnostic accuracy
- Acetic acid–zinc formalin, as safe alternative to B-5 fixative, 205
- Acknowledgments, 969
- Activated B-cell markers, and germinal center markers separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- Activated partial thromboplastin time, and simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894
- Activator protein 2 γ , expression in intratubular germ cell neoplasia of testis, 873
- Adenocarcinoma
- colorectal, differential expression of AP-1 transcription factor family members in human neuroendocrine neoplasms and, 11
 - of esophagus, decoy receptor 3 overexpression in precancerous lesions and, 282
 - pancreatic
 - cytologic grade independently predicts survival of patients with, 697
 - mesothelin as overexpressed in, but not in normal pancreas and chronic pancreatitis, 838
 - and recent developments and selected diagnostic problems in endometrial carcinoma, S42
- Adenoid squamous cell carcinoma, of upper aerodigestive tract, S104
- Adenoma
- colorectal, differential expression of AP-1 transcription factor family members in human neuroendocrine neoplasms and, 11
 - growth hormone, receptors and sites of synthesis and storage of γ -aminobutyric acid in pituitary gland and in, 550
 - pituitary, S115
 - primary parathyroid tumors of the mediastinum, clinicopathologic and immunohistochemical study of 17 cases, 749
 - serrated polyps of the large intestine, morphologic and molecular review of an evolving concept, 380
 - of thyroid, 239
- Adenomyoma, atypical polypoid, and recent developments and selected diagnostic problems in endometrial carcinoma, S42
- Adenosquamous carcinoma, of upper aerodigestive tract, S103
- Aerodigestive tract, upper, squamous cell carcinoma variants of, S96
- Albumin, urinary, high-performance liquid chromatography assay for, performance characteristics of, 219
- Alkaline phosphatase, lack of activity of predicts meningioma recurrence, 252
- Amelanotic melanoma, diagnostic deceptive histologic variants of, S64
- American Board of Medical Specialties, S5
- γ -Aminobutyric acid, in human pituitary gland and in growth hormone adenomas, receptors and sites of synthesis and storage of, 550
- Anal canal, carcinoma of, epidermal growth factor receptor expression in, 20
- Anemia
- hemolytic, autoimmune, automatic laboratory-initiated reflex testing to identify patients with, 129
 - and low blast count myeloid disorders with Auer rods, 191
- Antibodies. *See also* Antineutrophil cytoplasmic antibodies; Antiphospholipid antibody syndrome; Monoclonal antibodies
- p63/AMACR cocktail restaining of needle biopsy tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708
 - positive pregnancy tests in nongravid, premenopausal woman due to hCG β -chain production by multiple myeloma, 108
 - selection in immunohistochemical detection of in mantle cell lymphoma, 782
- Antigens
- abnormal patterns of expression in follicular lymphoma, a flow cytometric study, 576
 - four-color flow cytometry shows strong concordance with bone marrow cytology and cytogenetics in evaluation for myelodysplasia, 170
 - T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937
- Antineutrophil cytoplasmic antibodies, and primary vasculitides, S85
- Antiphospholipid antibody syndrome
- and direct thrombin inhibitors as affecting results and interpretation of lupus anticoagulant testing, 586

- simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894
- AP-1 transcription factor, in human colorectal epithelial and neuroendocrine neoplasms, differential expression of family members of, 11
- Apoptosis
 - survivin as marker of cervical intraepithelial neoplasia and high-risk human papillomavirus and a predictor of virus clearance and prognosis in cervical cancer, 113
 - survivin expression in intracranial ependymomas and its correlation with tumor cell proliferation and patient outcome, 543
- Argatroban, as affecting results and interpretation of lupus anticoagulant testing, 586
- Arteritis, in large vessel vasculitis classification, S85
- ASCP President's Message, 151, 313, 470, 610, 815, 970
- Astrocytoma, clarifying the diffuse gliomas, update on morphologic features and markers that discriminate oligodendroglioma from, 755
- Atypical squamous cells, enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women ("PM cells"), as cause of overdiagnosis of, 58
- Atypical squamous cells of undetermined significance, enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women ("PM cells"), as cause of ASC overdiagnosis, 58
- Auer rods, low blast count myeloid disorders with, 191
- Automated hematology analyzers
 - CellaVision DM96 system, performance evaluation of, 770
 - quantitative determination of neutrophil VCS parameters by Coulter analyzer, new and reliable indicators of acute bacterial infection, 440
- Automation. *See also* Automated hematology analyzers
 - simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894

B

- B-5 fixative, acetic acid-zinc-formalin as safe alternative to, 205
- Bacterial infections, quantitative determination of neutrophil VCS parameters by Coulter automated hematology analyzer, new and reliable indicators of acute, 440
- Barrett esophagus
 - decoy receptor 3 overexpression in precancerous lesions and adenocarcinoma of the esophagus, 282
 - Rab11a immunohistochemical analysis does not distinguish indefinite, low-, and high-grade dysplasia in, 519
- Basaloid squamous cell carcinoma, of upper aerodigestive tract, S100
- B cells
 - differential DNA methylation of gene promoters in small B-cell lymphoma, 430
 - expanded populations of surface membrane immunoglobulin light chain-negative, in lymph nodes, as not always indicative of B-cell lymphoma, 143
 - germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
 - proteomic profiling of mature CD10+ B-cell lymphomas, 920
- bcl-2, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- bcl-6, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- Berberine, *Plasmodium* DNA fluoresces with, a novel approach for diagnosis of malarial parasites, 408
- Bethesda system, clinical significance of benign-appearing endometrial cells on a Papanicolaou test in women 40 years or older, 829, 834
- Bile duct
 - adenocarcinoma of, mesothelin as overexpressed in, but not in normal pancreas and chronic pancreatitis, 838
 - biliary brush cytology and detection of cholangiocarcinoma, evaluation of specific cytomorphologic features and CA 19-9 levels, 355
 - extrahepatic carcinoma of, CDX2 and MUC2 protein expression in, 361
- Biliary brush cytology, and detection of cholangiocarcinoma in primary sclerosing cholangitis, evaluation of specific cytomorphologic features and CA 19-9 levels, 355
- Biomarkers, clinical, and pharmacogenomics in drug discovery and development, S29
- BK virus
 - in renal allografts, real-time polymerase chain reaction and laser capture microdissection for diagnosis of, 537
 - sequence variations in control region of, as essential for development of polyomavirus nephropathy, 303
- Blasts
 - in acute leukemia, podocalyxin as marker of, 134
 - inv(16)(p13q22) in chronic myelogenous leukemia in blast phase, 807
 - low blast count myeloid disorders with Auer rods, clinicopathologic analysis of 9 cases, 191
- Blood banking, operation theater blood transaction system as virtual, 124
- Blood collection tubes, plastic vs glass, clinically relevant differences in prothrombin time and international normalized ratio values related to sample collection in, 902
- Blood cultures, real-time PCR for rapid detection of methicillin-susceptible and methicillin-resistant *Staphylococcus aureus* directly from, 404
- Blood transfusion. *See* Transfusion
- BNP, laboratory testing for B-type natriuretic peptides, clinical usefulness, utilization, and impact on hospital operations, S122
- Bone marrow
 - in evaluation for myelodysplasia, four-color flow cytometry shows strong concordance with cytology and cytogenetics of, 170
 - flow cytometric analysis of monocytes as tool for distinguishing chronic myelomonocytic leukemia from reactive monocytosis, 799
 - mast cells, delineation of patterns of infiltration in systemic mastocytosis, value of CD25, correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560
- Bone neoplasms, chordoma, intralesional fibrous septum in, a clinicopathologic and immunohistochemical study of 122 lesions, 288
- Book Reviews, 154, 472, 816
- Brain neoplasms, clarifying the diffuse gliomas, update on morphologic features and markers that discriminate oligodendroglioma from astrocytoma, 755

Brainstem, in sudden unexpected infant and perinatal death, 259
BRCA1, tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16

Breast. *See also* Breast neoplasms

core needle biopsy of
 fibroepithelial lesions with cellular stroma on, are there predictors of outcome on surgical excision, 342
 immunohistochemical staining for cyclin D1 and Ki-67 aids in stratification of atypical ductal hyperplasia diagnosed on, 862

Breast-conserving therapy, molecular clonality relationships in initial carcinomas, ipsilateral breast failures, and distant metastases in patients treated with, 49

Breast failure, ipsilateral, molecular clonality relationships in initial carcinomas, distant metastases and, in patients treated with breast-conserving therapy, 49

Breast neoplasms

carcinoma

adenoid cystic, *c-kit* expression in, 733
 immunohistochemical staining for cyclin D1 and Ki-67 aids in stratification of atypical ductal hyperplasia diagnosed on core biopsy, 862

intratumoral heterogeneity and amplification status with equivocal (2+) HER-2 immunostaining, 273
 molecular clonality relationships in initial carcinomas, ipsilateral breast failures, and distant metastases in patients treated with breast-conserving therapy, 49

erb-b2 amplification by fluorescence in situ hybridization in specimens from, read as 2+ in immunohistochemical analysis, 97
 tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16

Bronchial brushing specimens, root cause analysis for errors in, 883

Bronchial washing specimens, root cause analysis for errors in, 883

C

CA 19-9, biliary brush cytology and detection of cholangiocarcinoma in primary sclerosing cholangitis, evaluation of specific cytomorphologic features and levels of, 355

Cancer. *See also sites and types by name*

pharmacogenomics and clinical biomarkers in drug discovery and development, S29

Carcinoma. *See also* Adenocarcinoma

anal canal, epidermal growth factor receptor expression in, 20 of breast

adenoid cystic, *c-kit* expression in, 733
 immunohistochemical staining for cyclin D1 and Ki-67 aids in stratification of atypical ductal hyperplasia diagnosed on core biopsy, 862

intratumoral heterogeneity and amplification status with equivocal (2+) HER-2 immunostaining, 273
 molecular clonality relationships in initial carcinomas, ipsilateral breast failures, and distant metastases in patients treated with breast-conserving therapy, 49

cervical, clinical significance of benign-appearing endometrial cells on a Papanicolaou test in women 40 years or older, 829, 834

colorectal

data management approach to quality assurance using reports from two institutions as a model, 83

differential expression of AP-1 transcription factor family members in human neuroendocrine neoplasms and, 11
 endometrial, recent developments and selected diagnostic problems in, S42

extrahepatic bile duct, CDX2 and MUC2 protein expression in, 361
 hepatocellular

c-kit+ tumor cells in hepatitis B virus-associated, 31
 primary liver carcinoma arising in people younger than 30 years, 491, 512

ovarian, protein expression and prognostic value of genes in *erb-b* signaling pathway in advanced, 392

primary parathyroid tumors of the mediastinum, clinicopathologic and immunohistochemical study of 17 cases, 749

of prostate, p63/AMACR antibody cocktail restaining of needle biopsy tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708

sinonasal undifferentiated, S112

small cell undifferentiated (neuroendocrine), S113

squamous cell

of head and neck, protein tyrosine kinase expression in, 71
 of upper aerodigestive tract, variants of, S96

of thyroid, interobserver variability in fine-needle aspiration interpretation of lesions showing predominantly colloid and follicular groups, 239

Cardiac conduction system. *See* Heart conduction system

CD3, flow cytometric immunophenotyping of adult T-cell leukemia/lymphoma using CD3 gating, 199

CD5

follicular origin of subset of CD5+ diffuse large B-cell lymphomas, 182

T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

CD10

abnormal patterns of antigenic expression in follicular lymphoma, a flow cytometric study, 576

germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790

immunohistochemical staining in urothelial neoplasms, 371
 proteomic profiling of mature CD10+ B-cell lymphomas, 920

CD14, flow cytometric analysis of different epitopes can help identify immature monocyte populations, 930

CD16, and T-cell large granular lymphocyte leukemias having multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

CD19, abnormal patterns of antigenic expression in follicular lymphoma, 576

CD20, abnormal patterns of antigenic expression in follicular lymphoma, 576

CD25, delineation of patterns of bone marrow mast cell infiltration in systemic mastocytosis, value of, and correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560

CD34

c-kit+ tumor cells in hepatitis B virus-associated hepatocellular carcinoma, 31

podocalyxin as marker of blasts in acute leukemia, 134

CD44, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790

CD56

- and primary liver carcinoma arising in people younger than 30 years, 491, 512
- and T-cell large granular lymphocyte leukemias having multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

CD57, and T-cell large granular lymphocyte leukemias having multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

CD94, and T-cell large granular lymphocyte leukemias having multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

CD138, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790

CDX2, expression in extrahepatic bile duct carcinoma, 361

CellaVision DM96 system, performance evaluation of, 770

Cell cycle, and activated Akt and PTEN expression in malignant melanoma, relationship with clinical outcome, 528

Cell proliferation

- paratesticular cysts with benign epithelial proliferations of wolffian origin, 245

- survivin expression in intracranial ependymomas and its correlation with patient outcome and tumor, 543

Central nervous system, primary vasculitis of, S90

Certification for pathologists, maintenance of, S5

Cervical cancer

- clinical significance of benign-appearing endometrial cells in women 40 years or older, 829, 834

- comparison of prototype PCR assay and Hybrid Capture 2 for detection of carcinogenic human papillomavirus DNA in women with equivocal or mildly abnormal Papanicolaou smears, 722

- enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women ("PM cells"), as cause of ASC overdiagnosis, 58

- screening, reproducibility of HPV DNA testing by Hybrid Capture 2, intralaboratory and interlaboratory quality control in seven laboratories participating in same clinical trial, 716

- survivin as marker of cervical intraepithelial neoplasia and high-risk human papillomavirus and a predictor of virus clearance and prognosis in, 113

Cervical epithelial neoplasia, and comparison of prototype PCR assay and Hybrid Capture 2 for detection of carcinogenic human papillomavirus DNA in women with equivocal or mildly abnormal Papanicolaou smears, 722

Cholangiocarcinoma, in primary sclerosing cholangitis, biliary brush cytology and detection of, evaluation of specific cytomorphic features and CA 19-9 levels, 355

Cholangitis, primary sclerosing, biliary brush cytology and detection of cholangiocarcinoma in, evaluation of specific cytomorphic features and CA 19-9 levels, 355

Chondrosarcoma, mesenchymal, of sinonasal tract, S117

Chordoma, intralesional fibrous septum in, a clinicopathologic and immunohistochemical study of 122 lesions, 288

Chromatography, high-performance liquid

- denaturing, for mutation scanning, high-resolution melting analysis compared with, cystic fibrosis transmembrane conductance regulator gene as a model for, 330
- performance characteristics of three assay methods used in

- fasting and postmethionine load plasma homocysteine determinations in patients with vascular diseases, 675

- for urinary albumin, performance characteristics of, 219

Chromosome 1p, in clarifying the diffuse gliomas, 755

Chromosome 19q, in clarifying the diffuse gliomas, 755

Churg-Strauss syndrome, S91

Cirrhosis, iron accumulation in chronic hepatitis C, relation of hepatic iron distribution, *HFE* genotype, and disease course, 846

c-kit gene

- c-kit*+ tumor cells in hepatitis B virus-associated hepatocellular carcinoma, 31

- and delineation of patterns of bone marrow mast cell infiltration in systemic mastocytosis, value of CD25, correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560

- expression in adenoid cystic carcinoma of the breast, 733

Class I MHC receptors, and T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and, 937

Clonality, relationships in initial carcinomas, ipsilateral breast failures, and distant metastases in patients treated with breast-conserving therapy, 49

Coccidioidomycosis, musculoskeletal, unusual sites of disease in nonendemic area, 693

Colorectal cancer

- carcinoma, data management approach to quality assurance using reports from two institutions as a model, 83

- differential expression of AP-1 transcription factor family members in epithelial and neuroendocrine neoplasms, 11

Compensation models, establishing in an academic pathology department, S8

Computers

- computer-based screening for transfusion-related acute lung injury, 601

- operation theater blood transaction system as virtual blood banking, 124

Congestive heart failure, B-type natriuretic peptides in, laboratory testing for, S122

Consultations, pathology. *See* Pathology consultations

Control region, sequence variations in BK virus, as essential for development of polyomavirus nephropathy, 303

Core needle biopsy, of breast

- fibroepithelial lesions with cellular stroma on, are there predictors of outcome on surgical excision?, 342

- immunohistochemical staining for cyclin D1 and Ki-67 aids in stratification of atypical ductal hyperplasia diagnosed on, 862

Corrections, 476, 615

Correspondence, 155, 314, 474, 611, 817, 972

Coumadin, and direct thrombin inhibitors as affecting results and interpretation of lupus anticoagulant testing, 586

Crossmatching, and operation theater blood transaction system as virtual blood banking, 124

Cryoglobulinemic vasculitis, S92

Cutaneous leukocytoclastic vasculitis, S92

Cutaneous melanocytic lesions, selected problem areas of, S52

CXCR3, and type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37

Cyclin D1

- immunohistochemical staining for Ki-67 and, aids in stratification of atypical ductal hyperplasia diagnosed on breast core biopsy, 862

- in mantle cell lymphoma, antibody selection in immunohistochemical detection of, 782
- Cyclin H, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- Cystadenocarcinoma, pulmonary mucinous cystic neoplasia, spectrum of, clinicopathologic and immunohistochemical study of ten cases and review of the literature, 62
- Cystadenoma, pulmonary mucinous cystic neoplasia, spectrum of, clinicopathologic and immunohistochemical study of ten cases and review of the literature, 62
- Cystic fibrosis transmembrane conductance regulator (*CFTR*) gene, as model for comparison of denaturing high-performance liquid chromatography and high-resolution melting analysis for mutation scanning, 330
- Cytogenetics
 - four-color flow cytometry shows strong concordance with bone marrow cytology and, in evaluation for myelodysplasia, 170
 - inv(16)(p13q22) in chronic myelogenous leukemia in blast phase, 807
 - lack of alkaline phosphatase activity predicts recurrence of meningioma, 252
- Cytokeratins, and primary liver carcinoma arising in people younger than 30 years, 491, 512
- Cytology. *See also* Papanicolaou smear
 - biliary brush, and detection of cholangiocarcinoma in primary sclerosing cholangitis, evaluation of specific cytomorphic features and CA 19-9 levels, 355
 - four-color flow cytometry shows strong concordance with bone marrow cytology and cytogenetics in evaluation for myelodysplasia, 170
 - interobserver variability in thyroid fine-needle aspiration interpretation of lesions showing predominantly colloid and follicular groups, 239
 - polyomavirus-infected renal transplant recipients' urine specimens, analysis of, correlation of routine urine cytology, fluorescence in situ hybridization, and digital image analysis, 854
 - pulmonary, improving quality of diagnosis in, root cause analysis for errors in bronchial washing and brushing specimens, 883
- Cytomegalovirus, and colorectal intramucosal perikarya of ganglion cells, 269

D

- Databases, for improving patient safety by examining pathology errors, 489, 500
- Data management software, as quality assurance approach, using colorectal carcinoma reports from two institutions as a model, 83
- Decoy receptor 3, overexpression in precancerous lesions and adenocarcinoma of the esophagus, 282
- Dendritic cells, follicular, in origin of subset of CD5+ diffuse large B-cell lymphomas, 182
- Diabetes mellitus, high-performance liquid chromatography assay for urinary albumin, performance characteristics of, 219
- Diagnostic accuracy, comparison of disagreement and error rates for three types of interdepartmental consultations, 878
- Digibind, binding with digoxin-like immunoreactive components of ginseng, 229
- Digital imaging, polyomavirus-infected renal transplant recipients' urine specimens, analysis of, correlation of routine urine cytology, fluorescence in situ hybridization, and, 854
- Digoxin, serum, ginseng interfering with measurement by immunoassay, 229
- Digoxin-like immunoreactive substances, of ginseng, Digibind binding with, 229
- Direct thrombin inhibitors, as affecting results and interpretation of lupus anticoagulant testing, 586
- DNA, performance comparison of Inform HPV and Hybrid Capture 2 high-risk DNA tests, using SurePath liquid-based Pap test as collection method, 24
- DNA methylation, differential, of gene promoters in small B-cell lymphoma, 430
- Drug interference, ginseng interfering with serum digoxin measurement by immunoassay, 229
- Drugs, therapeutic. *See also* Drug interference
 - inhibition of serum pseudocholinesterase activity in vitro by commonly used, 226
 - pharmacogenomics and clinical biomarkers in discovery and development of, 529
- Dysplasia. *See also* Myelodysplastic syndromes
 - in Barrett esophagus, Rab11a immunohistochemical analysis does not distinguish indefinite, low-, and high-grade, 519

E

- Electrophoresis, capillary zone, in detecting subtle free light chain (FLC)-producing M proteins, serum free light chain measurement can aid, 214
- Emergency department, reducing laboratory turnaround time outliers can reduce patient length of stay in, an 11-hospital study, 672
- Endometrial neoplasms
 - carcinoma, recent developments and selected diagnostic problems in, 542
 - clinical significance of benign-appearing endometrial cells on a Papanicolaou test in women 40 years or older, 829, 834
 - and precursors in a Japanese population, association of mismatch repair deficiency with *PTEN* frameshift mutations in, 89
- Enzyme immunoassay, performance characteristics of three assay methods used in fasting and postmethionine load plasma homocysteine determinations in patients with vascular diseases, 675
- Ependymomas, intracranial, survivin expression in, and its correlation with tumor cell proliferation and patient outcome, 543
- Epidermal growth factor receptor, expression in anal canal carcinoma, 20
- Epididymal tumors, and paratesticular cysts with benign epithelial proliferations of wolffian origin, 245
- Epigenetics, and differential DNA methylation of gene promoters in small B-cell lymphoma, 430
- Epithelium
 - AP-1 transcription factor in human colorectal epithelial and neuroendocrine neoplasms, differential expression of family members of, 11
 - epididymal tumors and paratesticular cysts with benign epithelial proliferations of wolffian origin, 245

Epstein-Barr virus, status in pediatric Burkitt lymphoma, TCL1 expression and, 569

erb-b1 gene, protein expression and prognostic value of genes in *erb-b* signaling pathway in advanced ovarian carcinoma, 392

erb-b2 gene

- amplification by fluorescence in situ hybridization in breast cancer specimens, read as 2+ in immunohistochemical analysis, 97
- protein expression and prognostic value of genes in *erb-b* signaling pathway in advanced ovarian carcinoma, 392

ERK1/2, and activated Akt and PTEN expression in malignant melanoma, relationship with clinical outcome, 528

Error

- comparison of disagreement and error rates for three types of interdepartmental consultations, 878
- database construction for improving patient safety by examining pathology, 489, 500
- improving quality of cytology diagnosis, root cause analysis for, in bronchial washing and brushing specimens, 883

Esophageal neoplasms, decoy receptor 3 overexpression in precancerous, 282

Estrogen receptor, rabbit monoclonal antibodies and, 295

Extramedullary plasmacytoma, of sinonasal tract, S119

Extraosseous Ewing sarcoma/peripheral neuroectodermal tumor, of sinonasal tract, S115

F

Fibroadenoma, fibroepithelial lesions with cellular stroma on breast core needle biopsy, are there predictors of outcome on surgical excision?, 342

Fine-needle aspiration biopsy

- endoscopic ultrasound, cytologic grade predicts survival of patients with pancreatic adenocarcinoma, 697
- of thyroid, interobserver variability in interpretation of lesions showing predominantly colloid and follicular groups, 239

Fixation, acetic acid–zinc-formalin as safe alternative to B-5 fixative, 205

Flow cytometry

- abnormal patterns of antigenic expression in follicular lymphoma, 576
- analysis of different CD14 epitopes can help identify immature monocyte populations, 930
- four-color, shows strong concordance with bone marrow cytology and cytogenetics in evaluation for myelodysplasia, 170
- immunophenotyping by

 - of adult T-cell leukemia/lymphoma using CD3 gating, 199
 - expanded populations of surface membrane immunoglobulin light chain–negative B cells in lymph nodes are not always indicative of B-cell lymphoma, 143
 - lymphoplasmacytic lymphoma/Waldenström macroglobulinemia, profile of, 414
 - of monocytes as tool for distinguishing chronic myelomonocytic leukemia from reactive monocytosis, 799

- T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

Fluorescence in situ hybridization

- erb-b2* amplification by, in breast cancer specimens, read as 2+ in immunohistochemical analysis, 97

- intratumoral heterogeneity and amplification status in breast carcinomas with equivocal (2+) HER-2 immunostaining, 273

polyomavirus–infected renal transplant recipients' urine specimens, analysis of, correlation of routine urine cytology, digital image analysis, and, 854

- as superior to PCR in detecting t(14;18)(q32;q21)–*IgH/bcl-2* in follicular lymphoma, using paraffin-embedded tissue samples, 421

Fluorescence polarization immunoassay, performance characteristics of three assay methods used in fasting and postmethionine load plasma homocysteine determinations in patients with vascular diseases, 675

Forensic pathology, techniques and criteria in pathologic and forensic-medical diagnostics in sudden infant death, 259

Formalin, acetic acid–zinc, as safe alternative to B-5 fixative, 205

Frameshift mutations, association of mismatch repair deficiency with *PTEN*, in endometrial cancer and precursors in a Japanese population, 89

Free light chains, serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing M proteins, 214

Fungi, musculoskeletal coccidioidomycosis, unusual sites of disease in nonendemic area, 693

G

Ganglia, colorectal intramucosal perikarya of, 269

Gastrointestinal tract

- colorectal intramucosal perikarya of ganglion cells, 269
- factors associated with disease progression in patients with gastrointestinal stromal tumors in pre-imatinib era, 740

Gene amplification

- erb-b2* amplification by fluorescence in situ hybridization in breast cancer specimens, read as 2+ in immunohistochemical analysis, 97
- intratumoral heterogeneity and amplification status in breast carcinomas with equivocal (2+) HER-2 immunostaining, 273

Germ cell tumors, of testis, activator protein 2 γ expression in intratubular, 873

Germinal center markers, and activated B-cell markers separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790

Giant cell arteritis, S85

Ginseng, interference with serum digoxin immunoassays, 229

Gliomas, diffuse, clarifying the, update on morphologic features and markers that discriminate oligodendroglioma from astrocytoma, 755

Glutamate decarboxylase, and receptors and sites of synthesis and storage of γ -aminobutyric acid in human pituitary glands and in growth hormone adenomas, 550

Granuloma, and colorectal intramucosal perikarya of ganglion cells, 269

Granulomatosis, Wegener, S90

Granzyme B, and type I interferon–associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37

Growth hormone, adenomas of, receptors and sites of synthesis and storage of γ -aminobutyric acid in human pituitary glands and in, 550

H

- Head and neck neoplasms, squamous cell carcinoma, protein tyrosine kinase expression in, 71
- Heart conduction system, in sudden unexpected infant and perinatal death, 259
- Hematology analyzers, automated. *See* Automated hematology analyzers
- Hematopoietic tissues, and acetic acid–zinc-formalin as safe alternative to B-5 fixative, 205
- Henoch-Schönlein purpura, S92
- Heparin, and direct thrombin inhibitors as affecting results and interpretation of lupus anticoagulant testing, 586
- Hepatitis B virus–associated hepatocellular carcinoma, c-kit+ tumor cells in, 31
- Hepatitis C, chronic, iron accumulation in, relation of hepatic iron distribution, *HFE* genotype, and disease course, 846
- Hepatocytes, in primary liver carcinoma arising in people younger than 30 years, 491, 512
- HER-2/*neu*, intratumoral heterogeneity and amplification status in breast carcinomas with equivocal immunostaining, 273
- Heterophil antibodies, positive pregnancy tests in nongravid, premenopausal woman due to hCG β -chain production by multiple myeloma, 108
- Heterozygosity, loss of. *See* Loss of heterozygosity
- Hexagonal phospholipid assay, and simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894
- HFE* mutations, iron accumulation in chronic hepatitis C, relation of hepatic iron distribution, *HFE* genotype, and disease course, 846
- Histogenesis, c-kit+ tumor cells in hepatitis B virus–associated hepatocellular carcinoma, 31
- Histology, type I interferon–associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- Homocysteine, in patients with vascular disease, performance characteristics of three assay methods used in determining fasting and postmethionine load plasma, 675
- Human chorionic gonadotropin, positive pregnancy tests in nongravid, premenopausal woman, due to hCG β -chain production by multiple myeloma, 108
- Human papillomavirus
DNA testing for
comparison of prototype PCR assay and Hybrid Capture 2 for, in women with equivocal or mildly abnormal Papanicolaou smears, 722
by Hybrid Capture 2, reproducibility of, intralaboratory and interlaboratory quality control in seven laboratories participating in same clinical trial, 716
Inform HPV and Hybrid Capture 2 tests, performance comparison of, using SurePath liquid-based Pap test as collection method, 24
enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women ("PM cells"), as cause of ASC overdiagnosis, 58
high-risk, survival as marker of cervical intraepithelial neoplasia and, and a predictor of virus clearance and prognosis in cervical cancer, 113
- Hybrid Capture 2
for detection of carcinogenic human papillomavirus DNA in women with equivocal or mildly abnormal Papanicolaou smears, comparison of prototype PCR assay and, 722

- for detection of high-risk human papillomavirus DNA, performance comparison of Inform HPV and, using SurePath liquid-based Pap test as collection method, 24
- human papillomavirus DNA testing by, in screening setting, reproducibility of, intralaboratory and interlaboratory quality control in seven laboratories participating in same clinical trial, 716

Hyperplasia

- atypical ductal, diagnosed on breast core biopsy, immunohistochemical staining for cyclin D1 and Ki-67 aids in stratification of, 862
- endometrial, association of mismatch repair deficiency with *PTEN* frameshift mutations in endometrial cancers and precursors in a Japanese population, 89
- florid follicular, expanded populations of surface membrane immunoglobulin light chain–negative B cells in lymph nodes are not always indicative of B-cell lymphoma, 143
- mast cell, delineation of patterns of bone marrow mast cell infiltration in systemic mastocytosis, value of CD25, correlation with subvariants of the disease, and separation from, 560
- reactive follicular
distinction of follicular lymphoma from, 576
proteomic profiling of mature CD10+ B-cell lymphomas, 920

Hypersensitivity vasculitis, S91

- Hypoplasia, arcuate nucleus, in sudden unexpected infant and perinatal death, 259

I

- IgH/bcl-2*, FISH as superior to PCR in detecting t(14;18)(q32;q21)–*IgH/bcl-2* in follicular lymphoma, using paraffin-embedded tissue samples, 421
- Image analysis, automated digital, CellaVision DM96 system, performance evaluation of, 770
- Imatinib mesylate (Gleevec; STI571), factors associated with disease progression in patients with gastrointestinal stromal tumors in pre-imatinib era, 740
- Immunoassay
high-performance liquid chromatography assay for urinary albumin, performance characteristics of, 219
positive pregnancy tests in nongravid, premenopausal woman due to hCG β -chain production by multiple myeloma, 108
for serum digoxin measurement, ginseng interfering with, 229
- Immunoglobulin
FISH as superior to PCR in detecting t(14;18)(q32;q21)–*IgH/bcl-2* in follicular lymphoma, using paraffin-embedded tissue samples, 421
serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing M proteins, 214
- Immunohistochemistry
activated Akt and PTEN expression in malignant melanoma, relationship with clinical outcome, 528
activator protein 2 γ expression in intratubular germ cell neoplasia of testis, 873
CD10 staining in urothelial neoplasms, 371
CDX2 and MUC2 protein expression in extrahepatic bile duct carcinoma, 361

- c-kit expression in adenoid cystic carcinoma of the breast, 733
- c-kit+ tumor cells in hepatitis B virus-associated hepatocellular carcinoma, 31
- cyclin D1 and Ki-67 staining aids in stratification of atypical ductal hyperplasia diagnosed on breast core biopsy, 862
- cyclin D1 detection in mantle cell lymphoma, antibody selection in, 782
- decoy receptor 3 overexpression in precancerous lesions and adenocarcinoma of the esophagus, 282
- delineation of patterns of bone marrow mast cell infiltration in systemic mastocytosis, value of CD25, correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560
- diffuse gliomas, clarifying the, update on morphologic features and markers that discriminate oligodendroglioma from astrocytoma, 755
- erb-b2 amplification by breast neoplasms in breast cancer specimens read as 2+ in, 97
- germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- intralesional fibrous septum in chordoma, a clinicopathologic and immunohistochemical study of 122 lesions, 288
- intratumoral heterogeneity and amplification status in breast carcinomas with equivocal (2+) HER-2 immunostaining, 273
- mesothelin as overexpressed in pancreaticobiliary adenocarcinomas but not in normal pancreas and chronic pancreatitis, 838
- myeloid sarcoma involving the testis, 445
- p63/AMACR antibody cocktail restaining of prostate needle biopsy tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708
- positive pregnancy tests in nongravid, premenopausal woman due to hCG β -chain production by multiple myeloma, 108
- primary liver carcinoma arising in people younger than 30 years, 491, 512
- primary parathyroid tumors of the mediastinum, clinicopathologic and immunohistochemical study of 17 cases, 749
- protein expression and prognostic value of genes in erb-b signaling pathway in advanced ovarian carcinoma, 392
- protein tyrosine kinase expression in head and neck squamous cell carcinoma, 71
- pulmonary mucinous cystic neoplasia, spectrum of, clinicopathologic and immunohistochemical study of ten cases and review of the literature, 62
- Rab11a immunohistochemical analysis does not distinguish indefinite, low-, and high-grade dysplasia in Barrett esophagus, 519
- rabbit monoclonal antibodies, comparative study between novel category of reagents and corresponding mouse monoclonal antibody, 295
- survivin expression in intracranial ependymomas and its correlation with tumor cell proliferation and patient outcome, 543
- Immunopathology, type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- Immunophenotyping, by flow cytometry
 - of adult T-cell leukemia/lymphoma using CD3 gating, 199
 - expanded populations of surface membrane immunoglobulin light chain-negative B cells in lymph nodes are not always indicative of B-cell lymphoma, 143
- lymphoplasmacytic lymphoma/Waldenström macroglobulinemia, profile of, 414
- of monocytes as tool for distinguishing chronic myelomonocytic leukemia from reactive monocytosis, 799
- T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937
- Infant, techniques and criteria in pathologic and forensic-medical diagnostics in sudden infant death, 259
- Infections, bacterial, quantitative determination of neutrophil VCS parameters by Coulter automated hematology analyzer, new and reliable indicators of acute, 440
- Informatics
 - database construction for improving patient safety by examining pathology errors, 489, 500
 - data management approach to quality assurance, using colorectal carcinoma reports from two institutions as a model, 83
- Inform HPV, for human papillomavirus testing, performance comparison of Hybrid Capture 2 and, using SurePath liquid-based Pap test as collection method, 24
- In Memoriam
 - Philip S. Feldman, 471
 - John W. Rebuck, 971
 - Austin L. Vickery, Jr, 152
- In situ hybridization, fluorescence. *See* Fluorescence in situ hybridization
- Interference, positive pregnancy tests in nongravid, premenopausal woman due to hCG β -chain production by multiple myeloma, 108
- Interferon, type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- International normalized ratio
 - clinically relevant differences in prothrombin time and INR values related to blood sample collection in plastic vs glass tubes, 902
 - and simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894
- Interobserver variability
 - Rab11a immunohistochemical analysis does not distinguish indefinite, low-, and high-grade dysplasia in Barrett esophagus, 519
 - in thyroid fine-needle aspiration interpretation of lesions showing predominantly colloid and follicular groups, 239
- Intraepithelial neoplasia, cervical, survivin as marker of, and of high-risk human papillomavirus and a predictor of virus clearance and prognosis in cervical cancer, 113
- Intralesional fibrous septum, in chordoma, a clinicopathologic and immunohistochemical study of 122 lesions, 288
- inv(16)(p13q22), in chronic myelogenous leukemia in blast phase, 807
- IP10/CXCL10, and type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- Iron accumulation, in chronic hepatitis C, relation of hepatic iron distribution, *HFE* genotype, and disease course, 846

J

- JC virus, and real-time polymerase chain reaction and laser capture microdissection for diagnosis of BK virus infection in renal allografts, 537

K

- Kawasaki disease, S89
- Ki-67 antigen
immunohistochemical staining for cyclin D1 and, aids in stratification of atypical ductal hyperplasia diagnosed on breast core biopsy, 862
and survivin expression in intracranial ependymomas and its correlation with tumor cell proliferation and patient outcome, 543
- Kidney. *See also* Kidney transplantation
sequence variations in BK virus control region, as essential for development of polyomavirus nephropathy, 303
- Kidney transplantation
polyomavirus-infected renal transplant recipients' urine specimens, analysis of, correlation of routine urine cytology, fluorescence in situ hybridization, and digital image analysis, 854
real-time polymerase chain reaction and laser capture microdissection for diagnosis of BK virus infection in renal allografts, 537
- Killer cell immunoglobulin-like receptors, and T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937
- kit* gene, and factors associated with disease progression in patients with gastrointestinal stromal tumors in pre-imatinib era, 740

L

- Large intestine, serrated polyps of the, morphologic and molecular review of an evolving concept, 380
- Large vessel vasculitis, S85
- Laser capture microdissection, and real-time polymerase chain reaction, for diagnosis of BK virus infection in renal allografts, 537
- Length of stay, reducing laboratory turnaround time outliers can reduce emergency department patient, an 11-hospital study, 672
- Lentiginous nevi, atypical, S59
- Lepirudin, as affecting results and interpretation of lupus anticoagulant testing, 586
- Leukemia
acute, podocalyxin as marker of blasts in, 134
acute myeloid
flow cytometric analysis of different CD14 epitopes can help identify immature monocyte populations, 920
low blast count myeloid disorders with Auer rods, 191
and myeloid sarcoma involving the testis, 445
chronic lymphocytic, serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing M proteins, 214
chronic myelogenous, inv(16)(p13q22) in, in blast phase, 807
chronic myelomonocytic, flow cytometric analysis of monocytes as tool for distinguishing reactive monocytosis from, 799
T-cell large granular lymphocyte, as having multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937
- Leukemia/lymphoma, T-cell, adult, flow cytometric immunophenotyping using CD3 gating, 199
- Liquid-based cytology, performance comparison of Hybrid Capture 2 and Inform HPV for human papillomavirus DNA detection, using SurePath Pap test as collection method, 24

Liver

- hepatocellular carcinoma
arising in people younger than 30 years, 491, 512
c-kit+ tumor cells in hepatitis B virus-associated, 31
iron accumulation in chronic hepatitis C, relation of hepatic iron distribution, *HFE* genotype, and disease course, 846
- Lobular growth pattern, and intralesional fibrous septum in chordoma, 288
- Loss of heterozygosity, molecular clonality relationships in initial carcinomas, ipsilateral breast failures, and distant metastases in patients treated with breast-conserving therapy, 49
- Lung. *See also* Lung neoplasms
computer-based screening for transfusion-related acute lung injury, 601
improving quality of cytology diagnosis, root cause analysis for errors in bronchial washing and brushing specimens, 883
- Lung neoplasms, pulmonary mucinous cystic neoplasia, spectrum of, clinicopathologic and immunohistochemical study of ten cases and review of the literature, 62
- Lupus anticoagulant
direct thrombin inhibitors as affecting results and interpretation of testing for, 586
simplified algorithm for laboratory detection of, utilization of two automated integrated tests, 894
- Lymph nodes
data management approach to quality assurance using colorectal carcinoma reports from two institutions as a model, 83
expanded populations of surface membrane immunoglobulin light chain-negative B cells in, as not always indicative of B-cell lymphoma, 143
sentinel, in patients with stage N0 cutaneous melanoma, importance of total number of, 77
- Lymphocytes
cytotoxic, type I interferon-associated recruitment of, as common mechanism in regressive melanocytic lesions, 37
T-cell large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 37
- Lymphocytosis, serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing M proteins, 214
- Lymphoepithelioma
"undifferentiated" small round cell tumors of the sinonasal tract, differential diagnosis update, S114
of upper aerodigestive tract, S105
- Lymphoma
adult T-cell leukemia/, flow cytometric immunophenotyping using CD3 gating, 199
- B-cell
CD5+ diffuse large, follicular origin of subset of, 182
expanded populations of surface membrane immunoglobulin light chain-negative B cells in lymph nodes are not always indicative of, 143
proteomic profiling of mature CD10+, 920
- Burkitt, TCL1 expression and Epstein-Barr virus status in pediatric, 569
- Burkitt and diffuse large B-cell, germinal center and activated B-cell profiles separate, in AIDS and non-AIDS cases, 790
- extranodal natural killer/T-cell, nasal type, S119
- follicular
abnormal patterns of antigenic expression in, a flow cytometric study, 576

FISH as superior to PCR in detecting t(14;18)(q32;q21)-*IgH/bcl-2* in, using paraffin-embedded tissue samples, 421

lymphoplasmacytic, immunophenotypic profile of LPL/Waldenström macroglobulinemia, 414

mantle cell, antibody selection in immunohistochemical detection of cyclin D1 in, 782

small B-cell, differential DNA methylation of gene promoters in, 430

M

Macroglobulinemia, Waldenström, immunophenotypic profile of lymphoplasmacytic lymphoma, 414

Maintenance of certification for pathologists, S5

Major histocompatibility complex, and T-cell large granular lymphocyte leukemias having multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937

Malaria, *Plasmodium* DNA fluoresces with berberine, a novel approach for diagnosis of parasites for, 408

Maspin, and tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16

Mass spectrometry, in proteomic profiling of mature CD10+ B-cell lymphomas, 920

Mast cells, bone marrow, delineation of patterns of infiltration in systemic mastocytosis, value of CD25, correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560

Mastocytosis, systemic, delineation of patterns of bone marrow mast cell infiltration in, value of CD25, correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560

MDM2 gene, tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16

Mediastinum, primary parathyroid tumors of the, clinicopathologic and immunohistochemical study of 17 cases, 749

Medium vessel vasculitis, S89

Melanocytic lesions

cutaneous, selected problem areas of, S52

regressive, type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in, 37

Melanoma

and cutaneous melanocytic lesions, selected problem areas of, S59

malignant

activated Akt and PTEN expression in, relationship with clinical outcome, 528

sentinel lymph nodes in patients with stage N0 cutaneous, importance of total number of, 77

sinonasal, S114

type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37

Melting analysis, high-resolution, for mutation scanning, denaturing high-performance liquid chromatography compared with, cystic fibrosis transmembrane conductance regulator gene as a model for, 330

Meningioma, lack of alkaline phosphatase activity predicts recurrence of, 252

Mercury, acetic acid-zinc-formalin as safe alternative to B-5 fixative, 205

Mesenchymal chondrosarcoma, of sinonasal tract, S117

Mesothelin, as overexpressed in pancreaticobiliary adenocarcinomas but not in normal pancreas and chronic pancreatitis, 838

Metastasis

of breast cancer, molecular clonality relationships in initial carcinomas, ipsilateral breast failures, and distant, in patients treated with breast-conserving therapy, 49

and cutaneous melanocytic lesions, selected problem areas of, S59

of cutaneous melanoma, sentinel lymph nodes in patients with stage N0, importance of total number of, 77

Methicillin, real-time PCR for rapid detection of susceptible and resistant *Staphylococcus aureus*, directly from blood cultures, 404

Methionine, and performance characteristics of three assay methods used in fasting and postmethionine load plasma homocysteine determinations in patients with vascular diseases, 675

α -Methyl coenzyme A racemase, p63/AMACR antibody cocktail restaining of prostate needle biopsy tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708

Microalbuminuria, high-performance liquid chromatography assay for urinary albumin, performance characteristics of, 219

Microarrays

DNA, differential DNA methylation of gene promoters in small B-cell lymphoma, 430

tissue

constructing without prefabricating recipient blocks, a novel approach, 103

germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790

protein expression and prognostic value of genes in erb-b signaling pathway in advanced ovarian carcinoma, 392

Microsatellite instability

and association of mismatch repair deficiency with *PTEN* frameshift mutations in endometrial cancer and precursors in a Japanese population, 89

serrated polyps of the large intestine, morphologic and molecular review of an evolving concept, 380

Microscopic polyangiitis, S91

MLH1 hypermethylation, and association of mismatch repair deficiency with *PTEN* frameshift mutations in endometrial cancer and precursors in a Japanese population, 89

MO2 epitope, flow cytometric analysis of different CD14 epitopes can help identify immature monocyte populations, 920

Monoclonal antibodies, rabbit, comparative study between novel category of reagents and corresponding mouse monoclonal antibody, 295

Monoclonal gammopathies, serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing M proteins, 214

Monocytes, flow cytometric analysis of

different CD14 epitopes can help identify immature populations, 920

as tool for distinguishing chronic myelomonocytic leukemia from reactive monocytosis, 799

Monocytosis, reactive, flow cytometric analysis of monocytes as tool for distinguishing chronic myelomonocytic leukemia from, 799

- Monosomy 1p, and abnormal expression of alkaline phosphatase in meningioma, 252
- M proteins, serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing, 214
- MUC2, expression in extrahepatic bile duct carcinoma, 361
- Mucinous neoplasms, spectrum of pulmonary mucinous cystic neoplasia, clinicopathologic and immunohistochemical study of ten cases and review of the literature, 62
- Mucosa, colorectal intramucosal perikarya of ganglion cells, 269
- Multiple myeloma
 positive pregnancy tests in nongravid, premenopausal woman due to hCG β -chain production by, 108
 serum free light chain (FLC) measurement can aid capillary zone electrophoresis in detecting subtle FLC-producing M proteins, 214
- MUM1, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- Mutations
 denaturing high-performance liquid chromatography and high-resolution melting analysis compared for mutation scanning, cystic fibrosis transmembrane conductance regulator gene as a model, 330
 frameshift, association of mismatch repair deficiency with *PTEN* in endometrial cancer and precursors in a Japanese population, 89
- MxA, type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- MY4 epitope, flow cytometric analysis of different CD14 epitopes can help identify immature monocyte populations, 920
- Myelodysplastic syndromes
 four-color flow cytometry shows strong concordance with bone marrow cytology and cytogenetics in evaluation for, 170
 low blast count myeloid disorders with Auer rods, 191
- N**
- Natriuretic peptides, B-type, laboratory testing for, clinical usefulness, utilization, and impact on hospital operations, S122
- Needle biopsy. *See also* Core needle biopsy; Fine-needle aspiration biopsy
 p63/AMACR antibody cocktail restaining of prostate tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708
- Neoplasm recurrence, local
 of cutaneous melanoma, sentinel lymph nodes in patients with stage N0, importance of total number of, 77
 of meningioma, lack of alkaline phosphatase activity predicts, 252
 molecular clonality relationships in initial carcinomas, ipsilateral breast failures, and distant metastases in patients treated with breast-conserving therapy, 49
- Neoplasms. *See* Metastasis; Neoplasm recurrence, local; Tumor grade; Tumor markers; Undifferentiated tumors; *See also sites and types by name*
- Nephropathy, sequence variations in BK virus control region, as essential for development polyomavirus, 303
- Nerve sheath tumors, superficial malignant peripheral, as rare and challenging diagnosis, 685
- Neural networks, artificial, in CellaVision DM96 system, 770
- Neuroblastoma, olfactory, S111
- Neuroendocrine neoplasms, AP-1 transcription factor in human colorectal epithelial and, differential expression of family members of, 11
- Neurofibromas, and superficial malignant peripheral nerve sheath tumor, 685
- Neutrophils, quantitative determination of VCS parameters of, by Coulter automated hematology analyzer, new and reliable indicators of acute bacterial infection, 440
- Nevoid melanoma, S63
- nm23* gene, tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16
- Noncoding region, sequence variations in BK virus control region, as essential for development of polyomavirus nephropathy, 303
- NT-proBNP, and laboratory testing for B-type natriuretic peptides, clinical usefulness, utilization, and impact on hospital operations, S122
- O**
- Olfactory neuroblastoma, S111
- Oligoastrocytoma, clarifying the diffuse gliomas, update on morphologic features and markers that discriminate oligodendroglioma from, 755
- Oligodendroglioma, clarifying the diffuse gliomas, update on morphologic features and markers that discriminate astrocytoma from, 755
- Operation theater blood transaction system, 124
- Osteosarcoma, small cell, S118
- Oval cells, c-kit+ tumor cells in hepatitis B virus-associated hepatocellular carcinoma, 31
- Ovarian neoplasms, carcinoma, protein expression and prognostic value of genes in *erb-b* signaling pathway in advanced, 392
- P**
- p53
 and Rab11a immunohistochemical analysis does not distinguish indefinite, low-, and high-grade dysplasia in Barrett esophagus, 519
 tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16
- p63, and AMACR antibody cocktail restaining of prostate needle biopsy tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708
- PAK1, germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
- p-AKT
 expression PTEN and activated, in malignant melanoma, relationship with clinical outcome, 528
 protein expression and prognostic value of genes in *erb-b* signaling pathway in advanced ovarian carcinoma, 392
- Pancreas, adenocarcinoma of
 cytologic grade independently predicts survival of patients with, 697
 mesothelin as overexpressed in, but not in normal pancreas and chronic pancreatitis, 838

- Pancreatitis, mesothelin as overexpressed in pancreaticobiliary adenocarcinomas but not in normal pancreas and chronic, 838
- Papanicolaou smear
- clinical significance of benign-appearing endometrial cells in women 40 years or older, 829, 834
 - comparison of prototype PCR assay and Hybrid Capture 2 for detection of carcinogenic human papillomavirus DNA in women with equivocal or mildly abnormal Papanicolaou smears, 722
 - enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women ("PM cells"), as cause of ASC overdiagnosis, 58
 - performance comparison of Hybrid Capture 2 and Inform HPV for detection of human papillomavirus DNA, using SurePath liquid-based Pap test as collection method, 24
- Papillary tumors
- endometrial carcinoma, recent developments and selected diagnostic problems in, S42
 - squamous cell carcinoma variants of upper aerodigestive tract, S98
- Paraffin-embedded tissue samples, FISH as superior to PCR in detecting t(14;18)(q32;q21)-*IgH/bcl-2* in follicular lymphoma, using, 421
- Parathyroid gland, and primary parathyroid tumors of the mediastinum, clinicopathologic and immunohistochemical study of 17 cases, 749
- Pathology consultations, interdepartmental, comparison of disagreement and error rates for three types of, 878
- Patient safety, database construction for improving, by examining pathology errors, 489, 500
- Peptides, natriuretic, B-type, laboratory testing for, clinical usefulness, utilization, and impact on hospital operations, S122
- Perikarya, of ganglion cells, colorectal intramucosal, 269
- Peripheral blood smears, CellaVision DM96 system for, performance evaluation of, 770
- p-ERK, protein expression and prognostic value of genes in erb-b signaling pathway in advanced ovarian carcinoma, 392
- Pharmacogenetics, and pharmacogenomics and clinical biomarkers in drug discovery and development, S29
- Pharmacogenomics, and clinical biomarkers in drug discovery and development, S29
- Philadelphia (Ph) chromosome, and inv(16)(p13q22) in chronic myelogenous leukemia in blast phase, 807
- Phyllodes tumor, fibroepithelial lesions with cellular stroma on breast core needle biopsy, are there predictors of outcome on surgical excision?, 342
- PIK3CA, protein expression and prognostic value of genes in erb-b signaling pathway in advanced ovarian carcinoma, 392
- Pituitary gland
- adenoma of, S115
 - receptors and sites of synthesis and storage of γ -aminobutyric acid in, and growth hormone adenoma, 550
- Plasmacytoma, extramedullary, of sinonasal tract, S119
- Plasmodium*, DNA fluoresces with berberine, as novel approach for diagnosis of malarial parasites, 408
- Platelet neutralization procedure, and direct thrombin inhibitors as affecting results and interpretation of lupus anticoagulant testing, 586
- "PM cells," enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women, as cause of ASC overdiagnosis, 58
- Podocalyxin, as marker of blasts in acute leukemia, 134
- Point-of-care testing, and laboratory testing for B-type natriuretic peptides, clinical usefulness, utilization, and impact on hospital operations, S122
- Polyangiitis, microscopic, S91
- Polyarteritis nodosa, S89
- Polymerase chain reaction
- comparison of Hybrid Capture 2 and prototype assay, for detection of carcinogenic human papillomavirus DNA in women with equivocal or mildly abnormal Papanicolaou smears, 722
 - differential DNA methylation of gene promoters in small B-cell lymphoma, 430
 - FISH as superior to in detecting t(14;18)(q32;q21)-*IgH/bcl-2* in follicular lymphoma, using paraffin-embedded tissue samples, 421
 - real-time
 - and laser capture microdissection for diagnosis of BK virus infection in renal allografts, 537
 - for rapid detection of methicillin-susceptible and methicillin-resistant *Staphylococcus aureus* directly from blood cultures, 404
- Polymavirus
- analysis of infected renal transplant recipients' urine specimens, correlation of routine urine cytology, fluorescence in situ hybridization, and digital image analysis, 854
 - sequence variations in BK virus control region, as essential for development of nephropathy associated with, 303
- Polyps, serrated, of the large intestine, morphologic and molecular review of an evolving concept, 380
- Pregnancy tests, positive, in nongravid, premenopausal woman, due to hCG β -chain production by multiple myeloma, 108
- ProBNP, laboratory testing for B-type natriuretic peptides, clinical usefulness, utilization, and impact on hospital operations, S122
- Progesterone receptor, rabbit monoclonal antibodies and, 295
- Promoter regions (genetics), differential DNA methylation of gene promoters in small B-cell lymphoma, 430
- Prostate cancer, p63/AMACR antibody cocktail restaining of needle biopsy tissues after transfer to charged slides, a viable approach in diagnosis of small atypical foci that are lost on block sectioning, 708
- Protein-chip technology, in proteomic profiling of mature CD10+ B-cell lymphomas, 920
- Proteomics
- pharmacogenomics and clinical biomarkers in drug discovery and development, S29
 - profiling of mature CD10+ B-cell lymphomas, 920
- Prothrombin time, clinically relevant differences international normalized ratio values and, related to blood sample collection in plastic vs glass tubes, 902
- Pseudocholinesterase, serum, inhibition of in vitro activity by commonly used drugs, 226
- PTEN
- and activated Akt expression in malignant melanoma, relationship with clinical outcome, 528
 - frameshift mutations in endometrial cancer and precursors in a Japanese population, association of mismatch repair deficiency with, 89
 - protein expression and prognostic value of genes in erb-b signaling pathway in advanced ovarian carcinoma, 392
 - tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16
- Publications, pathology, past, present, and future, 494

Q

Quality assurance

- comparison of disagreement and error rates for three types of interdepartmental consultations, 878
- data management approach to, using colorectal carcinoma reports from two institutions as a model, 83
- improving quality of cytology diagnosis, root cause analysis for errors in bronchial washing and brushing specimens, 883
- quality school, as innovative approach to laboratory quality practices training, 594
- reducing laboratory turnaround time outliers can reduce emergency department patient length of stay, an 11-hospital study, 672
- reproducibility of HPV DNA testing by Hybrid Capture 2 in screening setting, intralaboratory and interlaboratory quality control in seven laboratories participating in same clinical trial, 716

R

- Rab11a, immunohistochemical analysis does not distinguish indefinite, low-, and high-grade dysplasia in Barrett esophagus, 519
- Rabbit monoclonal antibodies, 295
- Rb1* gene, tumor suppressor genes in breast cancer, gatekeepers and caretakers, S16
- Reflex testing, automatic laboratory-initiated, to identify patients with autoimmune hemolytic anemia, 129
- Refractory anemia with excess blasts, 191
- Regression, spontaneous, type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- Rhabdomyosarcoma, of sinonasal tract, S116
- Root cause analysis, for errors in bronchial washing and brushing specimens, 883
- Russell viper venom test, dilute
 - direct thrombin inhibitors as affecting results and interpretation of lupus anticoagulant testing, 586
 - and simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894

S

- Safety. *See also* Patient safety
 - acetic acid-zinc-formalin as safe alternative to B-5 fixative, 205
- Salary models, establishing in an academic pathology department, S8
- Sarcoma
 - myeloid
 - involving the testis, 445
 - podocalyxin as marker of blasts in, 134
 - synovial, S118
- Schimcke pattern, S105
- Screening
 - computer-based, for transfusion-related acute lung injury, 601
 - HPV DNA testing by Hybrid Capture 2, reproducibility of, intralaboratory and interlaboratory quality control in seven laboratories participating in same clinical trial, 716
- Second opinions, comparison of disagreement and error rates for three types of interdepartmental consultations, 878

- Sequence analysis, sequence variations in BK virus control region, as essential for development of polyomavirus nephropathy, 303
- Serous carcinoma, recent developments and selected diagnostic problems in endometrial, S42
- Serrated polyps, of the large intestine, morphologic and molecular review of an evolving concept, 380
- Signal transduction, and protein tyrosine kinase expression in head and neck squamous cell carcinoma, 71
- Sinonasal tract, "undifferentiated" small round cell tumors of, differential diagnosis update, S110
- Skin cancer
 - sentinel lymph nodes in patients with stage N0 cutaneous melanoma, importance of total number of, 77
 - superficial malignant peripheral nerve sheath tumor, as rare and challenging diagnosis, 685
 - type I interferon-associated recruitment of cytotoxic lymphocytes, as common mechanism in regressive melanocytic lesions, 37
- Small round cell tumors, of the sinonasal tract, "undifferentiated," differential diagnosis update for, S110
- Small vessel vasculitis, S90
- Specimen collection and processing, clinically relevant differences in prothrombin time and INR values related to blood sample collection in plastic vs glass tubes, 902
- Spermatic cord, and paratesticular cysts with benign epithelial proliferations of wolffian origin, 245
- Spindle cell carcinoma, of upper aerodigestive tract, S102
- Spitz nevus, atypical and pagetoid, S57
- Squamous intraepithelial lesions, enlarged squamous cell nuclei in cervical cytologic specimens from perimenopausal women ("PM cells"), as cause of ASC overdiagnosis, 58
- Standardization
 - rabbit monoclonal antibodies, comparative study between novel category of reagents and corresponding mouse monoclonal antibody, 295
 - simplified algorithm for laboratory detection of lupus anticoagulants, utilization of two automated integrated tests, 894
- Staphylococcus aureus*, real-time PCR for rapid detection of methicillin-susceptible and methicillin-resistant, directly from blood cultures, 404
- Stromal tumors, gastrointestinal, factors associated with disease progression in patients with, in pre-imatinib era, 740
- Sudden infant death, techniques and criteria in pathologic and forensic-medical diagnostics in, 259
- Sudden perinatal death, techniques and criteria in pathologic and forensic-medical diagnostics in, 259
- SurePath liquid-based Pap test, performance comparison of Hybrid Capture 2 and Inform HPV using as collection method, 24
- Surface-enhanced laser desorption/ionization time-of-flight mass spectrometry (SELDI-TOF-MS), in proteomic profiling of mature CD10+ B-cell lymphomas, 920
- Surface immunoglobulin light chains, negative B cells in lymph nodes, as not always indicative of B-cell lymphoma, 143
- Survival rate, cytologic grade independently predicts survival of patients with pancreatic adenocarcinoma, 697
- Survivin
 - expression in intracranial ependymomas and its correlation with tumor cell proliferation and patient outcome, 543
 - as marker of cervical intraepithelial neoplasia and high-risk human papillomavirus and a predictor of virus clearance and prognosis in cervical cancer, 113
- Synovial sarcoma, S118

T

- Takayasu arteritis, S87
- T-cell leukemia-1 oncoprotein, expression of, and Epstein-Barr virus status in pediatric Burkitt lymphoma, 569
- T cells
- adult T-cell leukemia/lymphoma, flow cytometric immunophenotyping using CD3 gating, 199
 - large granular lymphocyte leukemias have multiple phenotypic abnormalities involving pan-T-cell antigens and receptors for MHC molecules, 937
- Testicular neoplasms
- germ cell, activator protein 2 γ expression in intratubular, 873
 - myeloid sarcoma involving the testis, 445
 - paratesticular cysts with benign epithelial proliferations of wolffian origin, 245
- Thrombin, direct thrombin inhibitors, as affecting results and interpretation of lupus anticoagulant testing, 586
- Thrombosis, reassessment of ABO blood group, sex, and age on laboratory parameters used to diagnose von Willebrand disorder, potential influence on diagnosis vs potential association with risk of, 910
- Thymus, and primary parathyroid tumors of the mediastinum, clinicopathologic and immunohistochemical study of 17 cases, 749
- Thyroid, fine-needle aspiration of, interobserver variability in interpretation of lesions showing predominantly colloid and follicular groups, 239
- Time-limited certificates, S5
- Topoisomerase 2 α
- and *erb-b2* gene amplification by fluorescence in situ hybridization in breast cancer specimens read as 2+ in immunohistochemical analysis, 97
 - and survivin expression in intracranial ependymomas and its correlation with tumor cell proliferation and patient outcome, 543
- Transfusion
- computer-based screening for transfusion-related acute lung injury, 601
 - intraoperative, operation theater blood transaction system as virtual blood banking, 124
 - quality school, an innovative approach to laboratory quality practices training, 594
- Tryptase, and delineation of patterns of bone marrow mast cell infiltration in systemic mastocytosis, value of CD25, correlation with subvariants of the disease, and separation from mast cell hyperplasia, 560
- t(9;22)(q34;q11.2) translocation, and inv(16)(p13q22) in chronic myelogenous leukemia in blast phase, 807
- t(14;18)(q32;q21) translocation, FISH as superior to PCR in detecting t(14;18)(q32;q21)-*IgH/bcl-2* in follicular lymphoma, using paraffin-embedded tissue samples, 421
- Tumor grade, cytologic grade independently predicts survival of patients with pancreatic adenocarcinoma, 697
- Tumor markers
- for clarifying diffuse gliomas, update on morphologic features and markers that discriminate oligodendroglioma from astrocytoma, 755
 - germinal center and activated B-cell profiles separate Burkitt and diffuse large B-cell lymphoma in AIDS and non-AIDS cases, 790
 - survivin as marker of cervical intraepithelial neoplasia and high-risk human papillomavirus and a predictor of virus clearance and prognosis in cervical cancer, 113
- Tumors. *See* Metastasis; Neoplasm recurrence, local; Tumor grade;

Tumor markers; Undifferentiated tumors; *See also sites and types by name*

- Tumor suppressor genes, in breast cancer, gatekeepers and caretakers, S16
- Turnaround time, reducing outliers can reduce emergency department patient length of stay, an 11-hospital study, 672
- Tyrosine kinase, protein, expression in head and neck squamous cell carcinoma, 71

U

- Undifferentiated tumors
- carcinoma, of upper aerodigestive tract, S105
 - small round cell tumors of the sinonasal tract, differential diagnosis update, S110
- Urinalysis
- high-performance liquid chromatography assay for urinary albumin, performance characteristics of, 219
 - polyomavirus-infected renal transplant recipients' urine specimens, analysis of, correlation of routine urine cytology, fluorescence in situ hybridization, and digital image analysis, 854
- Urothelial neoplasms, CD10 immunohistochemical staining in, 371

V

- Vascular diseases, performance characteristics of three assay methods used in fasting and postmethionine load plasma homocysteine determinations in patients with, 675
- Vasculitides, primary, a clinicopathologic correlation, S84
- VCS parameters, quantitative determination of neutrophil, by Coulter automated hematology analyzer, new and reliable indicators of acute bacterial infection, 440
- Verrucous carcinoma, of upper aerodigestive tract, S97
- Vesicular GABA transporter, and receptors and sites of synthesis and storage of γ -aminobutyric acid in human pituitary glands and in growth hormone adenomas, 550
- von Willebrand disorder, reassessment of ABO blood group, sex, and age on laboratory parameters used to diagnose, potential influence on diagnosis vs potential association with risk of thrombosis, 910
- von Willebrand factor, reassessment of ABO blood group, sex, and age on laboratory parameters used to diagnose von Willebrand disorder, potential influence on diagnosis vs potential association with risk of thrombosis, 910

W

- Warfarin
- and clinically relevant differences in prothrombin time and international normalized ratio values related to blood sample collection in plastic vs glass tubes, 902
 - and direct thrombin inhibitors as affecting results and interpretation of lupus anticoagulant testing, 586
- Wegener granulomatosis, S90
- White blood cell (WBC) differential count, CellaVision DM96 system for, performance evaluation of, 770
- Wolffian ducts, paratesticular cysts with benign epithelial proliferations of origin in, 245

